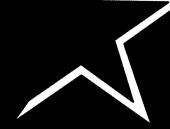
Navy Personnel Research, Studies, and Technology Department **Navy Personnel Command** (NPRST/PERS-1) Millington, TN 38055-1000 NPRST-TN-03-9

February 2003



Evaluation of Navy Counseling and Advocacy Programs: Relating Programs to Readiness and Retention

Michael J. Schwerin Michelle L. Kelley Kara L. Farrar Marian E. Lane

20030312 186



Approved for public release; distribution is unlimited.

Evaluation of Navy Counseling and Advocacy Programs: Relating Programs to Readiness and Retention

Michael J. Schwerin Michelle L. Kelley Kara L. Farrar Marian E. Lane

Reviewed and Approved by
Mary Sue Hay
Institute for Organizational Assessment

Released by David Alderton Acting Director

Approved for public release; distribution is unlimited.

Navy Personnel Research, Studies, and Technology
Navy Personnel Command
5720 Integrity Drive
Millington, TN 38055-1000
www.nprst.navy.mil

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notivithstanding any other provision of law, person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
28-02-2003	Technical Note	June 2001–August 2002
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER
Evaluation of Navy Counseling	and Advocacy Programs: Relating Programs	5b. GRANT NUMBER
to Readiness and Retention		
· · · · · · · · · · · · · · · · · · ·	•	5c. PROGRAM ELEMENT NUMBER
		64703N,L2097
6. AUTHOR(S)		5d. PROJECT NUMBER
Michael J. Schwerin, Michelle I	L. Kelley, Kara L. Farrar, Marian E. Lane	
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
		13DR02
7. PERFORMING ORGANIZATION NAME	(S) AND ADDRESS(ES) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Navy Personnel Research, St	adies, and Technology	
Navy Personnel Command		NPRST-TN-03-9
5720 Integrity Drive		
Millington, TN 38055-1000		
Minington, TN 38033-1000		,
9. SPONSORING / MONITORING AGENC	Y NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
Navy Personnel Command		
	Command for Personal Readiness and Community	
Support (PERS-661)		11. SPONSOR/MONITOR'S REPORT
5720 Integrity Drive		NUMBER(S)
Millington, TN 38055-1000		

12. DISTRIBUTION / AVAILABILITY STATEMENT

A – Approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

A portion of the work for this task was performed under a Scientific Services Agreement issued by Battelle, Research Triangle Park Office, 200 Park Drive, P. O. Box 12297, Research Triangle Office, NC 27709 (TCN 00088;DAAH04-96-C-0086)

14. ABSTRACT

Quality of life (QOL) programs represent a significant investment by the military. Policy-makers need data that will enable them to determine whether QOL programs contribute to positive perceptions of Navy life and impact military outcomes. In the initial phase of this project (see Schwerin, Michael, Glaser, & Uriell, 2001, a QOL assessment system and methodology were developed that could be applied to all Navy QOL programs. The present report evaluates the survey data collected on two QOL programs: New Parent Support Program (NPSP) and the Sexual Assault Victim Intervention (SAVI) program. Surveys were administered to NPSP and SAVI program users at sites Navy-wide. Program quality generally exceeded patrons' expectations and patrons believed the programs met the program specific objectives, the overarching *Reasons for Being* (RFB) program goals, and Navy organizational objectives. In addition, QOL, Readiness, and the program's contribution to the Service members' Intention to Remain in the military were predicted by various RFB objectives and program quality; however, these variables had less impact on overall Career Intentions.

15. SUBJECT TERMS

Program Evaluation, Quality of Life, Readiness, Retention, Family Support Programs

16. SECURITY CLASS	SIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON Kay Bailey
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED	UNLIMITED	49	19b. TELEPHONE NUMBER (include area code) 901-874-2115 (DSN 882)

Foreword

This work was supported by the Navy Personnel Research, Studies and Technology (NPRST) Department under the 6.6. Navy Studies and Analyses Program (Program Element – 64703N, L2097; Work Order 13DR02). Portions of this work were performed through the U.S. Army Research Office Scientific Services Program administered by Battelle (Delivery Order 588, Contract No. DAAH04-96-C-0086).

Previous research conducted by NPRST led to the development of a quality of life (QOL) program assessment system and methodology that focused on Sailor perceptions of the effectiveness of QOL programs both at the program-specific level and at a higher-order level—how well did these programs meet patron QOL needs. Examining QOL programs at this level allows for a degree of cross-program comparisons—how well did these QOL programs meet their overall QOL objectives. These higher-level comparisons were then correlated with self-report perceptions of program impact on readiness and retention plans. The current study uses the same program evaluation approach for two sensitive Fleet and Family Support Center programs, the New Parent Support Program (NPSP) and the Sexual Assault Victim Intervention (SAVI) program. Considerable time, energy, and expertise went into the development of an evaluation approach that was sensitive to client/victim experiences while also collecting valuable perceptions of program impact.

The authors wish to thank the head of the Counseling, Advocacy, and Prevention branch of the Navy Fleet and Family Support Program, Mr. Michael R. Hoskins as well as the managers of the SAVI program and NPSP Ms. Julia Powell and Ms. Janet Fagan, respectively. Dr. Terri Rau, head of Policy and Prevention Services has also made invaluable contributions to the success of this evaluation. Additionally, we would like to acknowledge the contribution of all SAVI and NPSP base-level program managers who contributed to the development of the evaluation measures and methodology.

David L. Alderton Acting Director This Page Intentionaly Left Blank

Summary

Introduction

Quality of Life (QOL) is a complex concept used to describe an individual's satisfaction with life in general and specific life domains. To meet the needs of Service members and their families, the Navy provides a broad range of support including human service programs known as QOL programs. Although QOL programs represent a significant investment by the Navy, little research has evaluated the perceived or actual efficacy of these programs. Policy-makers need accurate and timely information to help them determine whether QOL programs promote positive perceptions of the military and impact military outcomes. This project provides data on how well individual QOL programs meet the needs of Service members and their family members. Used in conjunction with regular assessments of QOL, this should provide important information for program planning and resource allocation.

Problem

With the advent of an all-volunteer force, maintaining Service member and family QOL moved from being a concern to being a necessity for attracting and retaining qualified personnel. The issue of QOL has intensified as the competition with private industry for highly skilled employees has increased. Many organizations, including the military, have turned their attention to regular assessment of QOL in an effort to assure that Sailor needs and expectations are being met. The present evaluation is designed to assess how well two Navy QOL programs meet the needs of Sailors and their families and contribute to QOL and other military objectives.

Objective

In the initial phase of this project (see Schwerin, Michael, Glaser, & Farrar, 2002), a QOL assessment system and methodology was developed that could be applied to a wide spectrum of QOL programs in the Navy. The QOL assessment measure was designed to be specific enough to capture the variability of various QOL programs but consistent enough to allow for program comparisons. In addition, the system was developed to measure program-specific data to help link Navy QOL programs with Sailor life needs.

Specifically, the assessment measure was designed to assess patron perceptions of how well the program met their needs as a QOL program. A list of *Reasons for Being* (RFB) items was developed that outlined reasons why the Navy supports any QOL program. Headquarters-level program managers reviewed the list and identified the RFB statements that were most relevant to their program. Additional items asked about customer satisfaction (i.e., satisfaction with hours of operation, facilities, customer service, quality of services, and range of services) and program-specific outcomes (e.g., patrons believed the program helped them cope with sexual assault). Finally, outcome items assessed the impact that these QOL programs had on patrons' overall QOL, readiness, and retention intent.

The primary objective of this study was to evaluate two QOL programs: the New Parent Support Program (NPSP) and the Sexual Assault Victim Intervention (SAVI) program. Data are presented on (a) satisfaction with program quality, (b) how well each QOL program met its primary objectives (e.g., improve parenting skills, help them cope with sexual trauma), (c) how well each program met its RFB (e.g., helps Service members concentrate on their job), and (d)

program impact on mission-related outcomes (i.e., QOL, readiness, and program impact on their decision to remain in the military).

Results and Conclusions

The quality of the NPSP exceeded most program users' expectations. In particular, the range of services, quality of services, and customer service was viewed very favorably by the overwhelming majority of respondents. The majority of program users believed NPSP services contributed to specific program goals. Specifically, over three-quarters of patrons and in some cases over 90 percent who took part in NPSP parenting classes or home-visiting services believed the services increased their sense of community, reduced parenting stress, and improved parenting skills.

NPSP services were also perceived as meeting overarching program goals—i.e., RFB items. Slightly over two thirds of the NPSP users believed that the program helped the Service member concentrate on his or her job/duties. Essentially all patrons believed the program was one way the Navy showed its concern for Service members and their families and that the program contributed to the health and safety of Sailors and their families. Results of the multiple regression analyses showed that program quality predicted QOL and readiness (i.e., "the extent to which I am prepared, able, and motivated to perform my job"), and that the program marginally contributed to Service members' intention to remain in the military.

The SAVI program consists of two components, a prevention/training component and an advocacy component. Both program users who attended training and clients who took part in advocacy services were highly satisfied with all aspects of SAVI program quality. In particular, range of services, customer service, and quality of services received very favorable ratings. Over two-thirds of patrons who had used counseling services offered by the SAVI program believed the services helped them deal with the original problem that resulted in pursuing SAVI program services, and believed the services positively impacted their ability to deal with sexual assault.

Over 90 percent of program users strongly agreed or agreed that the SAVI program was one way the Navy showed its concern for Service members and their families, and the program contributed to the health and safety of Sailors and their families. Respondents were split with respect to whether they perceived that SAVI program services impacted Service members' ability to perform their job/duties. Patrons believed the SAVI program contributed to QOL and Service member readiness (i.e., "the extent to which I am prepared, able, and motivated to perform my job"); however, program users were less likely to believe that the SAVI program impacted retention plans.

Results demonstrate that program users view the NPSP and SAVI program as high quality programs that meet their respective program goals. Importantly, for both QOL programs, range of services, customer service, and quality of services were rated more favorably than program hours and facilities. In addition, the majority of patrons believed the programs promoted positive perceptions of the military and resulted in greater QOL and increased Service member Readiness but had less impact on retention plans.

Although more sustained and longitudinal data collection would better evaluate the effectiveness of QOL programs over time, the present project provides an important initial step toward understanding program users' perceptions of specific QOL programs offered to Sailors and their families.

Table of Contents

Introduction	1
Problem	
Objective	
Literature Review	2
Family Influences on Member Satisfaction, Commitment,	
Reenlistment, and Military Readiness	2
Research on Parent Prevention and Training Programs	
in Civilian and Military Families	5
Evaluation of Programs Targeting Sexual Victimization	8
Quality of Life Measurement and Design Issues	9
Program Evaluation	
Levels of Program Evaluation	10
Objectives	
Research Questions	11
Method	11
Specific FFSC Programs Assesed	
New Parent Support Program (NPSP—FFSC Program)	
Sexual Assault Victim Intervention (SAVI—FFSC Program)	
Participants	
Survey	
Overview of Survey	
Program Demographic Items	
Program Specific Items	
Reasons for Being (RFB) Items	
Outcome Items	
Procedure	14
General Survey Procedure—NPSP and SAVI Program Surveys	14
Specific Survey Procedure—NPSP	14
Specific Survey Procedure—SAVI Program	15
Organization of the Report	15
Results	
New Parent Support Program (NPSP)	
Characteristics of Participants.	
Characteristics of New Parent Support Program	
Program QualityProgram Specific Outcomes	10
Reasons for Being (RFB) Outcomes	10
Organizational Outcomes	10
Organizational Outcomes Multiple Regression Analyses	10 22
Sexual Assault Victim Intervention Program	23 25
Characteristics of Participants	
Characteristics of the Sexual Assault Victim Intervention Program	
Program Quality	

Program Specific Outcomes	29
Reasons for Being (RFB) Outcomes	
Organizational Outcomes	
Multiple Regression Analysis	
Summary	34
New Parent Support Program (NPSP)	34
New Parent Support Program—Multiple Regression Analyses	37
Sexual Assault Victim Intervention Program (SAVI)	37
Sexual Assault Victim Intervention Program—Multiple Regression	
Analyses	
Strengths and Limitations of the Present Study	
Conclusions	
Appendix A: Child Maltreatment Literature Review	A-0
Appendix B: Sexual Victimization Literature Review	В-0
Appendix C: Distribution of Survey Responses by Program and Base	C-0
Appendix D: New Parent Support Program (NPSP) Survey	
Administration Instructions	D-0
Appendix E: Sexual Assault Victim Intervention (SAVI) Survey	
Administration Instructions	Е-0
List of Tables	
1. New Parent Support Program—Number of Surveys Returned	
by Region	16
2. New Parent Support Program—Program Components Represented	17
3. New Parent Support Program—Primary Reasons for Participating	
in New Parent Support Program	
4. New Parent Support Program—Duration of Participation	
5. New Parent Support Program—Program Quality Measures	
6. New Parent Support Program—Program Specific Outcome Items7. New Parent Support Program—Reason for Being Items	
8. New Parent Support Program—Active Duty Organizational	
Outcome Items	22
9. New Parent Support Program—Multiple Regression Analysis:	
Relationship of Program to Readiness, Retention Plans, and QOL	24
10. Sexual Assault Intervention Program—Number of Surveys	
Returned by Region	25
11. Sexual Assault Victim Intervention Program—Program	
Components Represented	26
12. Sexual Assault Victim Intervention Program—Primary Reasons for	~~
Participating in SAVI Program	26

14. Sexual Assault Victim Intervention Program—Reasons Why the	
Sexual Assault Not Reported Formally	27
15. Sexual Assault Victim Intervention Program—Program Quality	
Measures	28
16. Sexual Assault Victim Intervention Program—Program Specific	
Outcome Items	30
17. Sexual Assault Victim Intervention Program—Reason for Being Items	31
18. Sexual Assault Victim Intervention Program—Active Duty	
Organizational Outcome Items	32
19. Sexual Assault Victim Intervention Program—Multiple Regression	
Analysis: Relationship of Program to Readiness, Retention	
Plans, and QOL	33

Introduction

Navy service requires more from its personnel than does civilian employment. To meet the needs of Sailors and their families, the Navy provides a broad spectrum of programs and services. Many of these services fall into the broad category of Quality of Life (QOL) programs. Although QOL programs represent a significant investment by the military, little empirical information has documented the effectiveness of QOL programs or whether these programs contribute to military outcomes, such as readiness and retention. Policy-makers need information that will allow them to determine whether QOL programs meet the needs of military families, and contribute to enlistment, retention, and performance.

In 1999, the Assistant Chief of Naval Personnel for Personal Readiness & Community Support (PERS-6) requested that the Chief of Naval Personnel (CNP) prioritize research and development of funding for Navy Personnel Research, Studies, and Technology (NPRST) to conduct a QOL needs assessment and QOL program evaluation. In response to this request, program evaluation surveys were constructed to evaluate the effectiveness of the 13 QOL programs. Evaluation surveys focused on *Reasons for Being* (RFB; i.e., statements that headquarters-level QOL program managers believed reflected the primary intended purpose(s) of QOL programs). During the initial phase of the study, the program evaluation surveys were administered and data were collected at program sites Navy-wide. Program users rated the program in terms of program quality and how well the program met its objectives, RFB, and impacted military outcomes. This report summarizes the survey data for two of the QOL programs, New Parent Support Program (NPSP) and Sexual Assault Victim Intervention (SAVI). The effectiveness of the various programs are discussed, as well as how these results compare to previous research on QOL programs for military members and their families.

Problem

After the end of military conscription in 1973, the United States began the task of maintaining a military force based on voluntary induction. At that time, a marketplace philosophy of military enlistment replaced previously accepted notions of citizenship responsibility (e.g., Moskos, 1986). Now the Navy must compete with civilian employers to attract qualified personnel and ensure that motivated, highly skilled personnel are retained for military service. Because the repercussions of high attrition can affect recruitment, training, and, most importantly, military readiness and national security, the problem of retention is magnified within the Navy. Not only does the loss of qualified Sailors result in a potential threat to the Navy's ability to respond to short-term contingencies, losing highly-trained personnel to voluntary attrition is expensive. Clearly, attracting and retaining motivated, committed, high-quality Sailors is essential to maintaining operational readiness and meeting the increasing number of United States military obligations. One way the Navy may be able to retain qualified individuals is by providing high-quality QOL programs.

Although the military devotes considerable resources to QOL programs, only recently have researchers begun to examine who uses the programs, the effectiveness of various programs, and how different programs contribute to military outcomes. Today's Sailors face a greater myriad of missions, an increasing frequency of deployments, and the challenges of downsizing. Clearly, these challenges necessitate that the military develop a way of mitigating these negative aspects

of military life. One means of improving military life is through QOL programs. Regular evaluation of these QOL programs provides information on program effectiveness and whether programs promote QOL and facilitate military outcomes.

Objective

Historically, the military offered traditional personnel benefits, such as pay, medical benefits, retirement benefits. In recent years, the military has expanded the number and type of programs offered to Service members and their families. In 2001, the Navy allocated over \$400 million for the three largest QOL programs: Morale, Welfare, and Recreation (MWR); Child Development; and the Fleet and Family Support Center (FFSC). These programs are believed to improve the quality of life (QOL) for military families, increase the Service member's ability to perform his or her job, and facilitate retention of high quality personnel. In reality, however, many of these employee assistance programs are operating on an experimental basis, awaiting evidence that the programs are indeed viewed as effective and result in demonstrable benefits for the military (see Bourg & Segal, 1999 for a discussion).

The primary objective of this study is to examine two QOL programs offered by Navy FFSCs, the New Parent Support Program (NPSP) and the Sexual Assault Victim Intervention (SAVI) program. The NPSP received \$7.22 million and the SAVI program received \$1.76 million of the \$94.9 million allocated to FFSC. The aims of family support programs are "to enable and empower people by enhancing and promoting individuals and family capabilities that support and strengthen families functioning" (Dunst & Trivette, 1994, p. 31). In order to gain a better understanding of the survey results, a literature review was conducted, focusing on (a) the importance of family support for Service member readiness, (b) family influences on job performance, and (c) the impact of family support on Service member commitment. In addition, literature on the importance of QOL for military families and previous research evaluating the effectiveness of military QOL programs was reviewed.

The survey data examined in the present report were collected at each program site Navywide. Specifically, results are presented on (a) satisfaction with service quality, (b) how well each QOL program met its primary objectives (e.g., improve parenting skills), (c) how well each program met its RFB (e.g., helping service members concentrate on their job), and (d) program impact on mission-related outcomes (i.e., QOL, readiness, and retention plans).

Literature Review

Family Influences on Member Satisfaction, Commitment, Reenlistment, and Military Readiness

The social exchange theory framework has been hypothesized to underlie the commitment-turnover relationship (e.g., Cook, Molm, & Yamagishi, 1993; Diana, 1998; Steers, 1977). Specifically, an employee contributes time and energy to the organization in exchange for the fulfillment of personal growth and social and psychological needs. Numerous empirical studies have supported the social exchange theory of employee commitment. For instance, perceptions of being valued and cared for by the organization were positively related to employee conscientiousness, involvement, and innovation (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Furthermore, what the organization does for its employees influences work stress (House, 1981),

work-related attitudes (e.g., Fisher, 1985), innovative performance (Janssen, 2000), organizational commitment (e.g., Shore & Wayne, 1993), and turnover intentions (Hom & Griffeth, 1991; Lance, 1991; LaRocco & Jones, 1978, 1980).

Military service requires a commitment that extends beyond the work environment. A military career involves hectic and uncertain schedules, temporary separations due to training, periodic deployments, frequent and sometimes undesired or overseas relocations, and threats to the military member's safety. In order to facilitate mission accomplishment and support the military member's career advancement, family members may be required to compromise or delay personal goals (i.e., career opportunities, education), negotiate specific family roles (i.e., provider, homemaker, childcare), sacrifice family time and holidays, and periodically leave friends, schools, and neighborhoods behind. Military families must also adapt to the protocols and hierarchy associated with being in a military system. The process of adapting to the military has been referred to as adjusting to the "grid" structure of the military system (Trice, 1993). Few civilian organizations require this level of dedication from their employees. Because a military career places extraordinary demands on the family unit, Sailors and their families expect that the organization will support them in coping with these demands (Teplitzky, 1991). That is, social exchange may be heightened in organizations that impose on the family unit.

Important changes have taken place in the composition of the Navy. While these changes reflect shifts in the American workplace, they increase the need for programs that facilitate the health and well being of Sailors and their families. For instance, the mean age of the average Service member is two years older than at the inception of the all-volunteer force (Department of Defense, 2002). Armed Forces personnel are more likely to have families than their civilian peers. For instance, approximately 15.2 percent of civilian men between the ages of 20 and 24 are married (U.S. Bureau of the Census, 2002). Among men in the Armed Forces, this figure approaches 50 percent. Women in the military show a similar trend. Approximately 25.3 percent of civilian women between the ages of 20 and 24 are married (U.S. Bureau of the Census, 2002) compared to 50 percent in the military. As of June 2000, there were approximately 366,000 active duty Navy personnel and approximately 65 percent were married (DoD, 2002). Military personnel are also more likely to have children before the age of 25 than their civilian peers, which is evident by the fact that 39 percent of Navy women and 50 percent of Navy men are parents (DoD, 1999).

It is also important to note that there is an increasing number of nontraditional Navy families (i.e., dual-career couples, families in which the woman is the sole military member, single military parents, Service members with eldercare responsibilities, and so forth). For instance, over 57,000 active duty Navy personnel are women (14.6% of the total Navy force), and nearly 16 percent of all new recruits are women (Navy Office of Minority Affairs, 2002). Moreover, approximately 12.6 percent of Navy women and 5.3 percent of Navy men have sole or joint custody of their children (Olmsted & Underhill, in press). In summary, military families can be characterized as youthful and much more likely to be nontraditional than in the past (M. Olmsted, personal communication, 7/13/2001).

The Navy has recognized the increasing percentage of Service members with families, societal changes that have affected Navy families, and the many unique challenges to maintaining strong, supportive families and adequate QOL (for a discussion, see Lombard & Lombard, 1997). Military leaders recognize the importance that family life has on job performance and retainability of the military member (e.g., Bell, Stevens, & Segal, 1996; Bowen,

1989; Reilly, 1994; Schumm & Bell, 2000). In fact, both spouse and family support for the military member's career have been related to Service member job performance, job commitment, military career decisions, and re-enlistment intentions (e.g., Archer & Cauthorne, 1986; Bowen, 1986; Grace & Steiner, 1978; Griffeth, Rakoff, & Helms, 1992; Orthner, 1990; Orthner & Pittman, 1986; Reilly, 1994; Segal & Harris, 1993; Zirk, McTeigue, Wilson, Adelman, & Pliske, 1987). For instance, among military men, family-related stress increased the likelihood of lower job functioning (Bray, Camlin, Fairbank, Dunteman, & Wheeless, 2001). Schumm and Bell (2000) found that worrying about the effects of deployment on their families affected soldiers' duty performance during deployment, but that effect was offset by perceptions of leaders' concern for families. In a large-scale study of Army soldiers and their spouses, Bourg and Segal (1999) reported that both perceptions of Army policy support and unit leader practices directly affected the level of Army-family conflict reported by married enlisted couples. Furthermore, Army-family conflict affected the organizational commitment of soldiers both directly and indirectly through the spouse's commitment. Importantly, in a study of first-term Army officers, work/family conflict was negatively related to intentions to pursue a military career (Teplitzky, 1991).

Across a number of studies, family factors have been found to influence retention. For instance, in a study of Army families, Rosen and Durand (1995) found that the main predictor of retention for junior enlisted families was the spouse's unrealistic expectations of what the military could provide as resources for families of deployed soldiers. The main predictor of retention for senior enlisted couples was the spouse's wish that her husband stay in or leave the Army. In a study of Naval officers in the pre-all volunteer force era, Neumann, Abrahams, and Githens (1972) found that maintaining a satisfactory family life was the most important factor in distinguishing those who intended to stay from those who intended to leave the military. Diana (1998) found that family support contributed to the propensity to stay in the military above the contribution of affective commitment, work satisfaction, and career variables. Importantly, Diana (1998) reported that pressure from one's spouse and family was the only variable that influenced propensity to stay across all tenure groups (less than 9 years, 9 to 14 years, and over 15 years of service). Schumm, Bell, and Resnick (2001) found that family factors were more strongly related to retention than military readiness factors.

One of the ways that an organization can influence military family well being, increase member commitment, and provide an even exchange is through expanded support programs and services that address the QOL for Service member and their families. Similar to many organizations, the Navy provides a comprehensive support model of human resources. That is, the organization offers direct support programs to the employee *and* to their family members. Some have argued that comprehensive support programs may garner the family's support as an ally and increase the Service member's job commitment (Orthner & Pittman, 1986). In fact, Rosenberg (1994) found that Army spouses who perceived the institution as caring, supportive, and concerned about the military family experienced higher levels of psychological well being and satisfaction with military life.

Clearly, perceptions of organizational support are not arbitrary but instead have important implications for overall subjective QOL and for military outcomes. The U.S. Navy has responded to the need for primary prevention services for its families by creating a worldwide network of Navy FFSCs. The mission of Navy FFSCs is to provide psychoeducational programs and other services that assist commanders and help families manage the competing demands of

the military mission and the family (Blaisure & Arnold-Mann, 1992; Koopman & Goldhaber, 1997). More specifically, the goals of Navy FFSCs are to emphasize QOL among Navy personnel and their families, to prepare families for the vicissitudes of Navy life, to reduce family distractions that may interfere with a Sailor's ability to perform his or her job, and to increase member retention.

Providing QOL programs that meet the needs of Service members and their families is one way that the Navy is able to promote QOL for their families. In fact, the available literature indicates that family-supportive programs and policies positively impact the commitment of the family as well as the Service member's productivity, morale, job satisfaction, time spent on the job, and job commitment (Bourg & Segal, 1999; Kerce, Sheposh, & Knapp, 1999). For instance, in a study of 751 married Air Force personnel, Orthner and Pittman (1986) reported that positive program exposure determined perceived organizational support, family support for a military career, and job commitment. Positive program exposure was assessed by (a) the presence of an FFSC on the base where the family resided, (b) knowledge of family programs, and (c) satisfaction with family programs. In a subsequent study, Pittman and Orthner (1988) found that QOL was the only direct predictor of spousal support for the military member's career.

Less research has examined family programs relative to military outcomes; however, Soriano (1988, cited in Blaisure & Arnold-Mann, 1992) found that Navy command leaders perceived FFSC services positively and estimated that FFSCs saved an average of two hours of commanding and executive officers' time per week. This translated to savings of over 4 million dollars per year for the Navy. In a recent survey of command leaders, Caliber Associates (2000) reported that 51 percent of command leaders spent between 1 percent and 10 percent of their time each week dealing with Service member issues. Seventeen percent of leaders, however, spent more than 25 percent of their time each week addressing Service member issues. Importantly, command leaders perceived FFSCs services as beneficial. In summary, previous reports suggest that improved family support policies may yield benefits for the military in terms of reduced command time necessary for addressing non-mission related Service members issues and improved employee performance, morale, readiness, and retention.

Research on Parent Prevention and Training Programs in Civilian and Military Families

In 1974, the U.S. Congress passed the Child Abuse Prevention and Treatment Act (i.e., Public Law 98-457). By 1981, a directive assigned responsibility to all military branches for establishing and operating programs that address family and domestic violence. Each branch of the armed forces runs its family and domestic violence program (known as the Family Advocacy Program or FAP) separately. The DoD directive also defined specific categories and types of child and spouse abuse and directed that each branch of the military develops a central registry (DoD, 1986, 1992; For a more thorough discussion of child maltreatment, See Appendix A).

Although few studies have evaluated parenting programs and services offered to military families, considerable research has demonstrated the benefits of good parenting for positive child outcomes (e.g., Tamis-LeMonda, Bornstein, Baumwell, & Damast, 1996). For instance, good parenting promotes happiness, self-esteem, and a desire for achievement in children (Barber, 2001). Responsive parenting has been shown to predict children's language and play abilities (Tamis-LeMonda et al., 1996).

Over the past two decades, training techniques have been developed to enhance parental functioning and thereby ensure better outcomes for children. Some interventions try to change parenting practices into good, or at least better, practices. Other interventions aim to prevent poor parenting in the first place. While the former is most often targeted toward parents with a specific problem (for example, parenting a child with special emotional or physical needs) or type of behavior (harsh, punitive, abusive, or neglectful parenting), the latter interventions are often open to all parents, irrespective of their parenting skills. Some authors have differentiated between these two forms of parent training by designating the latter as parenting education (Barclay & Houts, 1990). However, most often parenting education and parent training are used interchangeably to denote a wide range of intervention models designed to enhance parents' capacities to foster optimal child development.

Importantly, training parents in skills that are beneficial to family life may improve parents' ability to buffer the risks to which their children are exposed (see Harachi, Catalano, & Hawkins, 1997 for a review). For instance, skills training has been shown to enable parents to avoid ineffective family management behaviors that can directly increase children's risk for problem behaviors (Farrington & Hawkins, 1991). Parent skills training in family management practices has produced short-term improvements in family interactions and school achievement, as well as reduced delinquency and other maladaptive behaviors (Catalano, Haggerty, Gainey, & Hoppe, 1995; Dumas, 1989). Forgatch and DeGarmo (1999) found that a parenting intervention program reduced coercive parenting and generally improved parenting practices. These improvements were correlated with improvements in teacher-reported school adjustment, child-reported maladjustment, and mother-reported maladjustment.

Furthermore, randomized experimental tests of parent skills training have been shown to be effective in increasing protective factors, including improving communication and decision-making skills and increasing parent-child bonding (Redmond, Spoth, Shin, & Lepper, 1999). In a series of studies, Anastopoulos and colleagues demonstrated significant post-treatment benefits in parenting stress and parenting self-esteem after parents of children with attention-deficit hyperactivity disorder (ADHD) attended a behavioral parenting training program. Importantly, improvements in parenting were associated with reductions in the severity of the children's ADHD symptoms (Anastopoulos, Shelton, DuPaul, & Guevremont, 1993).

Clearly, to be successful, parent education approaches, whether aimed at parent education, parents or children with behavior problems, or at parents who maltreat, must consider the parents' own background, needs, and limitations. Parent education programs often face major obstacles in recruiting and retaining parents in workshops. Parents with less education are more likely to drop out of treatment prematurely (Dore & Lee, 1999). Clearly, one-time-only basis workshops on parenting are important because some families cannot commit to continuing attendance. In addition, in their review of parenting programs for at-risk parents, Dore and Lee (1999) found a growing recognition that for those parents whose problems exceed simple lack of knowledge of child development and behavior management techniques, behavioral approaches must be supplemented with interventions that address broader deficits. Considerable research has demonstrated that experiencing physical abuse as a child is associated with the abuse of one's own children (see Widom, 1989). Childhood experience of violence was associated with infliction of intimate partner violence and child physical abuse risk (Merrill, Hervig, & Milner, 1996). In fact, Merrill et al. (1996) found that childhood experience of parent-child physical violence was the single best predictor of child physical abuse both for males and females.

Riggs and O'Leary (1996) found that for men, witnessing parental aggression led to aggressive attitudes, and experiencing child abuse led to a pattern of aggressive behavior, whereas for women, both witnessing parental aggression and experiencing child abuse led to interpersonal aggression. O'Leary (1987) suggested that personal history might be more important for women than for men, with an impulsive/defensive personality being directly related to interpersonal physical aggression. However, they believe that for men, verbal aggression may mediate the relationship between an aggressive or defensive personality and physical aggression toward one's partner. Again, these findings suggest that parent characteristics may influence parenting skills and behavior.

Although every branch of the military now offers parent support programs, relatively little empirical research has evaluated these programs. In 1995, the NPSP was initiated on 14 Army bases. The NPSP provides visiting nurses, social workers, and primary prevention programs for young families. Newborns are a major focus of this program, but families with children as old as six may be served. Families identified as *at risk* for abuse or neglect receive more intensive services (Landsverk & Lindsay, 1995). In 1996, additional Army bases began the NPSP. In addition to the NPSP, most Army bases include parenting training, mothers' groups, respite care, parent aides, "shaken baby" education programs, professional or volunteer home visitors, and food supplements in overseas locations where families are not eligible for Womin Infants and Children (WIC) or food stamps. Childcare providers receive mandatory training in identifying abuse and neglect. Also, school-based age-specific prevention education is provided to parents, caretakers, teachers, and children.

In one of the few studies evaluating a child abuse prevention program, Thompson, Ruma, Brewster, Besetsney, and Burke (1997) evaluated 379 parents at 25 U.S. Air Force bases who participated in a collaborative child physical abuse prevention project designed by the U.S. Air Force FAP and Father Flanagan's Boys' Home (Boys Town). Participants were active duty or civilian employee parents and their spouses. Participants reported decreased child behavior problems, improved relationships with family members, and reduced risk for child physical abuse after attending parenting sessions. Approximately 19 to 30 percent of individual parents reported significant improvement in the areas assessed. Parents who decreased their risk for child abuse were at a higher level of risk and were less satisfied with family relationships prior to their participation than those who did not change. It is important to realize that most parents who volunteer to attend parenting programs are not at-risk. Importantly, Thompson and colleagues demonstrated that many parents who were not at-risk for poor parenting demonstrated significant benefits from attending a parenting prevention program.

Data from offenders and spouses who took part in an FAP (Mollerstrom, Patchner, & Milner, 1995) found that 90.9 percent of the offenders and 87.5 percent of the spouses rated the Family Advocacy Program (FAP) as good or very good on a 4-point Likert-type scale (i.e., ranging from $1 = very \ poor$ to $4 = very \ good$). When asked if the FAP services received were beneficial, 80.4 percent of the offenders and 86.4 percent of the spouses indicated that the program services were helpful. Further, 78.8 percent of offenders and 82.6 percent of spouses said their family situation had improved overall as the result of the program. Because young families often are not well-integrated into community organizations and support systems, Raiha and Soma (1997) argued that units should provide time off to attend community and school-related prevention events.

Evaluation of Programs Targeting Sexual Victimization

Breitenbecher (2000) has conducted the most comprehensive review of sexual assault prevention programs to date (for a more thorough discussion of sexual victimization see Appendix B). It is important to note that her review focused on the effectiveness of programs targeted to college students. She argues that typical prevention programs are 45 minutes to 2 hours in length, and that key features of such programs include providing information about the prevalence of sexual assault, discrediting the rape mythology, discussing sexual role socialization processes, identifying risk-related dating behavior, and generating empathy for rape survivors.

Prevention programs designed to modify attitudes associated with sexual assault have had mixed results. In general, programs appear effective in changing false beliefs about rape, rape victims, and rapists (e.g., Feltey, Ainslie, & Geib, 1991), adversarial sexual beliefs (e.g., Lonsway et al., 1998), and judgments to rape or judgments about acquaintance rape (Johnson & Russ, 1989).

Consistent support has been demonstrated for the effectiveness of interventions in increasing knowledge about sexual assault. For instance, Breitenbecher and Scarce (2001) evaluated the effectiveness of a sexual assault education program for 94 college women assigned to a treatment or control group. Participants in both groups completed surveys that assessed sexual assault knowledge, dating behaviors, sexual communication, perception of risk for experiencing sexual aggression, resistance strategy, self-blame, disclosure of the experience, and reporting of sexual victimization to authorities. In addition, women in the treatment group participated in a 90-minute sexual assault education program focusing on psychological barriers to resistance. Analyses were conducted at the follow-up to determine if women who had participated in the intervention and those who participated in the control group differed on any of the outcome variables (i.e., resistance strategy, self-blame, disclosure to a friend or family member, or reporting of the assault to the police or campus security). Results indicated that women in the treatment and control groups who had experienced sexual victimization between time of the sexual assault education program and the follow-up did not differ on any of the outcome variables.

In general, studies suggest that programs are more effective in reducing sexual assault among women who have not been previously victimized. Specifically, Hanson and Gidycz (1993) found that a sexual assault prevention program reduced the incidence of sexual assault among women who had not been previously victimized. The program was not effective, however, in reducing the incidence of sexual assault among women who had been previously victimized. Similarly, in two separate studies, women who had experienced sexual victimization were assigned to a control or a treatment condition. Both conditions consisted of a single session providing information regarding the prevalence of sexual assault on college campuses, reviewing situational risk factors for sexual assault, and discussing protective behaviors (Breitenbecher & Gidycz, 1998; Hanson & Gidycz, 1993). Breitenbecher and Gidycz (1998) also provided participants with information on the role of psychological effects of an initial victimization experience in putting women at increased risk for revictimization. Although both studies showed success in preventing sexual assault among women without sexual assault histories, neither program successfully reduced the incidence of sexual assault among women with histories of victimization. In a recent study, Marx, Calhoun, Wilson, and Meyerson (2001) specifically

designed a program to prevent sexual revictimization. The program reduced risk of sexual revictimization over a two-month period. The study examined the relationship between recognition of the risk of sexual assault and experiencing a rape during the follow-up; however, 27 percent of study participants experienced revictimization by the end of the follow-up period.

One program that has been of benefit for civilian women who have experienced sexual assault involves expressive coping. Expressive coping occurs when the stressful event is addressed by expressing hurt or angry feelings and sharing these feelings with others. In contrast, nonexpressive coping occurs when tactics that are used to address the stressful event result in avoidance or denial of unpleasant and frightening feelings. Studies have shown that nonexpressive coping is associated with negative outcomes (Gold, Milan, Mayall, & Johnson, 1994; Johnson & Kenkel, 1991; Leitenberg, Greenwald, & Cato, 1992). It is important to note that none of these studies support the idea that expressive coping strategies prevent psychological distress.

Sailors have many characteristics that place them at risk for sexual victimization (e.g., young age, being single, alcohol use). In addition, requirements of Navy jobs may put Sailors at particular risk for sexual victimization. For instance, the basic training experience is stressful, and trainees separated from their friends and families may experience loneliness and isolation (Eitzen & Sawyer, 1997). Moreover, young Sailors are often assigned to geographic areas far from their homes. They may cope by using alcohol or looking for romantic relationships and unknowingly may place themselves at risk for sexual victimization. Sailors who have been recently relocated or are on leave in unfamiliar ports may increase their risk of victimization by being unfamiliar with the area or the customs and beliefs of the local country.

Although perpetrators of sexual assault are responsible for their actions, Sailors need to be educated in order to reduce their risk of being assaulted. For instance, most victims are assaulted by acquaintances (Koss, 1998); however, White and Humphrey (1995) found that women believe they are more likely to be assaulted by a stranger than by an acquaintance. Thus, Sailors must be aware of the risks of sexual assault both from strangers and acquaintances. Also, Sailors need to be aware of the increased likelihood of sexual assault when either the victim or perpetrator is under the influence of alcohol. Prevention programs need to be implemented early in the Sailors' career. In addition, individuals who have been the victims of sexual assault previously may need a more multifaceted approach to increase self-protection. Prevention programs should also teach Sailors to identify high-risk situations and teach skills for reducing risks.

Quality of Life Measurement and Design Issues

Program Evaluation

A program evaluation system that targets a broad range of QOL programs was developed for the U.S. Marine Corps (USMC) by Kerce and colleagues (Kerce, 1998; Kerce, Sheposh, & Knapp, 1999). Research by Kerce and colleagues specifically addressed the problem of linking QOL programs to life needs by focusing on program user ratings of program objectives or RFB. White, Baker, and Wolosin (1999) and Wilcove, Schwerin, and Wolosin (2002) extended this research by examining the relationship between life needs and global QOL, and then between global QOL and retention.

The QOL program assessment phase of this study follows the traditional Navy approach to QOL program evaluation of using a domain-based questionnaire for which program users provide subjective information about various aspects of their lives (domains) and overall QOL. Program quality information and information regarding how well the program satisfies life domains are used to determine how well Navy QOL programs meet Sailors' needs and contribute to QOL. The present evaluation also examines the relationships between QOL and military outcomes (Schwerin et al., 2002; Wilcove et al., 2000).

Levels of Program Evaluation

In 1988, evaluators at the William K. Kellogg Foundation first used an approach called cluster evaluation. This technique, now commonly used by other national grant foundations, was designed to "evaluate a program that is being administered at different (autonomous) program sites designed to bring about a common general change" (Sanders, 1992, p. 397). That is, cluster evaluation involves a second level of evaluation. As described in the W. K. Kellogg Foundation Evaluation Handbook (1998), the principal purpose of grouping similar evaluation projects together in clusters is to bring about more policy or systemic change than would be possible in a single evaluation project or in a series of unrelated evaluation projects. Specifically, while project-level evaluation is focused on the evaluation of a program, cluster evaluation looks across a group of projects to identify common threads and themes. That is, cluster evaluation examines the progress toward achieving the broad goals of a programming initiative. Importantly, information is reported to the Foundation in an aggregate form and not linked to individual clients or project participants (W. K. Kellogg Foundation Evaluation Handbook, 1998, p. 17).

When evaluating programs, one important consideration is determining what level of evaluation criteria should be used. Kirkpatrick (1994) outlines four levels of evaluation criteria commonly used to convey the depth of program impact on program users. The first level of evaluation, reaction, assesses merely what program participants thought of the program. Learning, the second level of evaluation, measures the transfer of knowledge of program principles, facts, techniques, and attitudes as specified by training objectives. The third level of evaluation, behavior, refers to the transfer of learning that extends beyond learning the subject matter of interest and affects behavior. The fourth and final level of evaluation, results, examines the impact of a program on objective organizational outcomes (e.g., turnover rates, absenteeism, workplace error rates, etc). The current evaluation is focused at the reaction level where NPSP and SAVI patrons are asked to report their perceived satisfaction with how well the program is meeting its objectives. This level of evaluation was selected primarily due to the funding and time constraints outlined by the research funding sponsor.

Objectives

Schwerin and colleagues designed a QOL assessment system and methodology that could be applied to the entire spectrum of QOL programs in the Navy (Schwerin et al., 2002). This type of system required that the measure be specific enough to capture the variability of the various programs, but have sufficient consistency across programs to allow for comparisons. The system was developed to capture program-specific data. This makes it possible to link Navy QOL programs with Sailor life needs.

Earlier Navy QOL research resulted in the design of a workable, self-sustaining assessment methodology to evaluate the contributions of a variety of QOL programs. In the present report, survey data obtained with the QOL assessment system and methodology are evaluated. Data were collected Navy-wide to evaluate two Fleet and Family Support Program (FFSP) programs – the NPSP and SAVI programs

Research Questions

For the NPSP and SAVI program, the following questions are addressed:

- 1. How do Sailors rate programs in terms of program quality (i.e., hours, facilities, range of services/programs, customer service, and quality of service)?
- 2. How well is each QOL program meeting its program-specific objectives?
- 3. How well is each program meeting its overall RFB objectives?
- 4. Which programs have the greatest impact on Sailors in terms of mission-related outcomes (e.g., QOL, readiness, and retention intent)?

Method

Specific FFSC Programs Assessed

New Parent Support Program (NPSP—FFSC Program)

The NPSP is comprised of two components: center-based parenting classes and home-based visits. The center-based parenting classes are designed to offer the skills and tools necessary to increase a parent's knowledge of child development and understanding of realistic expectations for their children, enhance parent-child interaction, improve family functioning, and reduce possible negative outcomes such as child abuse and neglect. The home-based visits provide more intensive and individualized support to expectant and new parents. The NPSP team members consist of community health nurses, home visitors and program assistants who are specially trained to provide information, support, and education to military families with complex needs.

Sexual Assault Victim Intervention (SAVI—FFSC Program)

The SAVI program consists of two components: a prevention/training and an advocacy component. The prevention/training component involves General Military Training (GMT) to all military and civilian personnel through presentations, general military education, training of SAVI advocates, and increased sexual assault awareness. The advocacy component provides the victims of sexual assault with professionally trained advocates who can provide information and emotional support and help guide victims through the various medical, legal, and investigative processes.

Participants

NPSP and SAVI program evaluation surveys were distributed to experienced program users at all NPSP and SAVI program sites Navy-wide (a complete list of locations and participation rate can be found in Appendix C). Experienced program users were defined as patrons/clients who have used the program more than once or, in their estimation, have a good familiarity with the program and services provided. The reason for imposing a participation screen for those receiving a survey was that many QOL programs have a large group of infrequent program contacts and a smaller group of knowledgeable program patrons (McKillip, 1987). Program managers preferred that surveys be administered to patrons who have sufficient knowledge to be able to evaluate the program. An additional reason for imposing a participant screen was that one focus of the evaluation was to examine whether NPSP and SAVI program services would impact perceptions of QOL and military outcomes. Thus, the evaluation team employed a purposive sampling approach (Levy & Lemeshow, 1999), which targets individuals considered most representative of actual program users. Surveys were administered to all experienced program users who took part in the NPSP or SAVI program between 01 January 2002 and 30 April 2002. Specific information about study respondents is detailed in the Results section for each program.

Survey

Overview of Survey

The NPSP and SAVI program assessment surveys were patterned after QOL program evaluation surveys designed as part of a larger program evaluation study (Schwerin et al., 2002). Survey measures focused on four main areas: demographics (i.e., respondent demographics and program demographics), program-specific outcomes (including customer satisfaction items), RFB outcomes, and organizational outcomes (i.e., overall QOL, readiness, and retention plans).

The demographic questions asked patrons for their Social Security Number (SSN)¹, status in the military (i.e., active duty, reserve, retiree, family member, government civilian), and the date they completed the survey. Although patrons were asked to self-report about their retention intent, because it typically takes between six and twelve months for active duty military personnel (i.e., officer and enlisted) to separate from the military, it was not possible to link self-report retention intent with actual retention behavior for these analyses. Asking program users to provide their SSN, however, makes it possible to validate survey information with actual retention behavior at a later date.

Program Demographic Items

Program demographic questions asked patrons how they had learned about the program, who had referred them to the program, and the length of time they had used the program. In addition,

¹ Participants were informed of their rights by way of the Privacy Act Statement and informed consent information on the first page of the survey. Informed consent is presumed when the participant reads the informed consent statement and subsequently completes the survey. Completed surveys were sealed in return postage-paid envelopes and mailed to the authors for analysis. Data were reported at an aggregate level so that no individual could be identified. Program representatives were instructed that participants could chose not to report their SSN or could decline to participate. in the study.

survey items asked respondents which program site they were attending at the time of the evaluation and which component of the program they were using when they completed the survey. Specifically, NPSP patrons were asked whether they had participated in parenting classes and home visiting service. SAVI program patrons were asked whether they had participated in sexual assault prevention presentations and advocate services.

Program-Specific Items

Program-specific items assessed general aspects of program quality (i.e., quality of service, customer service, range of services, value for your dollar, and hours of operation). To assist program managers and coordinators in learning more about the effectiveness of their specific programs, surveys contained additional program-specific outcome items that assessed program-specific objectives. The NPSP-specific outcome items assessed the degree to which the program helped parents cope with parenting stress in appropriate ways, improved parenting skills, and helped parents feel a greater sense of community. The SAVI program-specific outcomes included items that assessed whether SAVI program participants believed the program helped them cope with the problem that originally brought them to the program and helped them cope with sexual trauma.

Reason for Being (RFB) Items

RFB survey items assessed more general primary purpose(s) of Navy QOL programs. In their work with the USMC, Kerce and colleagues (Kerce, 1998; Kerce et al., 1999) developed a list of seven primary RFB statements. The present list of nine RFBs was expanded from the original list (see Schwerin et al., 2002). The RFB statements reflect how well a QOL program serves to:

- Promote the physical and psychological well being of members, maintaining quality of life at a level to attract qualified men and women to the U.S. Navy (USN);
- Promote the physical and psychological well being of members, maintaining quality of life at a level to retain qualified men and women in the USN;
- Provide a level of support that allows members to concentrate on their mission;
- Provide a level of support that allows availability for deployment;
- Provide educational opportunities in order to maintain Navy expertise;
- Demonstrate concern for members and their families to enhance morale and commitment to the USN;
- Help to ensure the health and safety of USN personnel and their families;
- Make available the skills and tools to adjust to the stresses of military life; and
- Increase personal and family satisfaction with the military life.

The list of RFB statements was constructed to reflect <u>any</u> reason the Navy might provide a QOL program. Thus, NPSP and SAVI program managers selected three primary RFB items from the list for inclusion on their program evaluation survey. The RFB items selected for the NPSP and SAVI evaluation surveys included demonstrating concern for members and their families, contributing to the health and safety of Sailors and their families, and helping members

concentrate on their mission. Although not necessarily independent of one another, RFB statements were measured independently with separate survey items to represent the selected program objectives.

Outcome Items

Previous evaluation of military QOL programs have focused on satisfaction with QOL programs (Kerce, 1998; Kerce et al., 1999) rather than how specific programs affect perceptions of QOL and how programs impact military outcomes such as readiness and retention. At a conceptual level, the outcomes of QOL, readiness, and retention plans would seem related. For instance, QOL programs might be expected to improve global perceptions of QOL, therefore affecting readiness. However, causal modeling studies demonstrate that readiness and career intentions are only partially mediated by QOL (Schwerin et al., 2002). Therefore four military outcomes are included and examined separately in the present evaluation. These are (a) Contributes to my QOL in the military; (b) Impacts my overall readiness (i.e., the extent to which I am prepared, able, and motivated to perform my job); and (c) Impacts my retention plans. It is important to note that the definition we used for readiness (where overall readiness consists of Sailors' perception of the extent to which they feel prepared, able, and motivated to perform their job) was derived from the work of several researchers including Burnam, Meredith, Sherbourne, Valdez, and Vernez (1992) and Kerce's (1995) extension of the Burnam et al.'s (1992) conceptual definition of individual readiness.

Procedure

General Survey Procedure—NPSP and SAVI Program Surveys

A member of the research team traveled to a Navy-wide meeting of each respective program's managers. At the meeting, the research team representative described the purpose of the evaluation, approach, and anticipated benefits of conducting the program evaluation study. Base-level program directors were then contacted via electronic mail, provided survey administration instructions, and asked to approximate the number of surveys needed for the data collection period. Supplies for the evaluation (i.e., survey forms, instructions, pencils, and postage-paid business reply envelopes) were shipped to each participating base-level program manager. Base-level program managers were also provided with a tracking sheet and asked to record every attempt to administer a survey, including if the patron accepted or refused, and the component in which the survey was administered (i.e., advocacy or training seminar for SAVI; home visit or seminar for NPSP). Additional materials were shipped to each site upon request. Data collection was conducted during a 4-month period from 01 January 2002 until 30 April 2002.

Specific Survey Procedure—NPSP

NPSP program evaluations were administered on-site whenever possible. Participants in the training component of the NPSP completed program evaluation surveys at the end of their training course, sealed the completed surveys in postage paid pre-addressed return envelopes, and handed them to the NPSP representative administering the survey. NPSP participants that participated in the home visitation component of the program were asked to complete the survey

at the end of their training, seal the completed survey in postage paid pre-addressed return envelope, and hand the sealed envelope to the NPSP representative making the home visit (see Appendix D).

Specific Survey Procedure—SAVI Program

SAVI program managers were asked to help develop a "victim sensitive" survey administration approach. Feedback from base-level SAVI program managers' modifications were made and submitted to the research team's Institutional Review Board (IRB). The IRB feedback was then incorporated into the victim sensitive approach. Based on the input from base-level SAVI program managers and the IRB, program patrons had the program evaluation survey read to them by a SAVI program representative or victim advocate while they responded on their own survey form. The participant informed consent statement was read aloud and program users were given the option of declining participation in person and declining to participate by responding to the first survey question that stated "I give my voluntary informed consent to participate in this survey project" (response options were yes or no).

For participants who participated in the training component of the program, immediately following the course, program evaluation surveys were distributed and survey instructions were read aloud by the instructor. Patrons completed the survey independently, sealed the completed survey in a pre-addressed envelope, and returned the envelope to the representative who administered the survey. A SAVI program representative remained available while clients completed the surveys. Completed surveys were mailed to the research team by the program representative (see Appendix E).

Organization of the Report

Results presented in this summary report reflect a descriptive analysis of program satisfaction as well as an analysis of the strength of the relationship between the programs and outcomes. For each program, the frequencies and means are reported for program quality, RFB items, and outcome measures. Frequencies and means are reported for all the participants who responded. In addition, results are reported separately for the active duty Navy respondents and the other groups (i.e., spouses of active duty Service members, etc.) who responded. Frequencies are reported as a valid percent so that only those who responded are measured. Therefore, the number of active duty Navy respondents and the number of all other groups presented in a table may not add up to the total respondents column because some respondents may not have indicated their duty classification. Finally, an alpha level of .05 was used for all statistical tests.

Also reported are the results of multiple regression analyses examining the relationship of individual study variables on the outcomes of QOL, readiness, and retention intent. The advantage of using multiple regression is that it is possible to examine the relationship between the programs and the outcomes while also seeing the key variables contributing to that relationship. It is important to recognize that regression analysis employs listwise deletion of missing data where survey respondents are included in the analysis only if they responded to all of the questions.

Results

New Parent Support Program (NPSP)

Characteristics of Participants

The following results were obtained from a total sample of 821 participants who had used the NPSP. Table 1 indicates the number of surveys returned by region. Participants included 32 percent (n = 255) active duty Navy Service members, 54 percent (n = 434) spouses of active duty Navy Service members, 2 percent (n = 16) other active duty Service members, 8 percent (n = 64) spouses of other active duty Service members, 2 percent DoD civilians (n = 13), 0.3 percent retirees (n = 2), and 2 percent (n = 19) other respondents. Forty-five percent of the NPSP respondents lived in civilian housing, 40 percent lived in base housing, 10 percent lived in military housing off base, and 2 percent lived in bachelor quarters.

Table 1.

New Parent Support Program—Number of Surveys Returned by Region

Region	Number of surveys returned
Europe	190
Guam	36
Japan	158
Mid-Atlantic	51
Midwest	33
Naval District Washington	9
Northeast	18
Northwest	105
Southeast	113
Southwest	10
South Texas	59

Note. There were 33 missing locations, 2 locations for which there is currently not a NPS program (Naval Telecommunications Area Master Station and New Orleans Naval Air Station), and 4 "Other OCONUS" locations including the USS Kitty Hawk, USCGC Sassafrass, USS Fedrick, and other not specified OCONUS locations.

Characteristics of New Parent Support Program

The frequencies presented in Table 2 indicate the components of the NPSP that respondents had attended. A majority of those who participated in the program evaluation survey attended parenting classes and home visiting services.

Table 2.
New Parent Support Program—Program Components Represented

	Number of Respondents	% of Respondents
Parenting classes	457	60.5%
Home visiting services	216	28.6%
Other ^a	82	10.9%

^a Includes labor partner support and pregnancy related services (n = 14), groups (n = 5), parent support services (n = 5) and orientation (n = 1), office visits (n = 4), information/referral/screening services (n = 4), none (n = 2), and both (n = 1).

Respondents were asked to indicate the primary reason for participating in the NPSP (see Table 3). A majority of respondents reported participating in the NPSP out of personal interest while others received either a hospital referral or a command referral. Respondents were also asked to indicate how long they had been participating in the program (see Table 4). Most survey respondents reported using the NPSP for less than 2 months while a sizable percentage of respondents reported using the program for 9 months or longer.

Table 3.

New Parent Support Program—Primary Reasons for Participating in

New Parent Support Program

	Number of Respondents	% of Respondents
Personal interest	656	83.2%
Hospital referral	68	8.6%
Command referral	26	3.3%
Other	38	4.8%

Table 4.

New Parent Support Program—Duration of Participation

	Number of Respondents	% of Respondents
2 months or less	395	49.5%
3 to 4 months	100	12.5%
5 to 6 months	87	10.9%
7 to 8 months	48	6.0%
9 or more months	168	21.1%

Program Quality

The responses to the program quality measures were generally positive. The majority of participants rated the various aspects of program quality as being as expected, better than expected, or much better than expected. Program quality ratings for the parenting classes and home visiting services are indicated in Table 5.

Program Specific Outcomes

Participants were asked three questions about how the program helped them with outcomes that are specific to the program. The impact of these program specific outcomes (i.e., helping parents feel a greater sense of community, helping parents cope with parenting stress in appropriate ways, and helping parents improve parenting skills) for the parenting classes and home visiting services are indicated in Table 6.

Reasons for Being (RFB) Outcomes

Participants were asked additional questions about how the NPSP helps them with the program RFBs (i.e. allows me to concentrate on my job, shows concern for members and their families, and contributes to the health and safety of Sailors and their families). The impact of these program RFB outcomes for the parenting classes and home visiting services are indicated in Table 7.

Organizational Outcomes

Active duty Navy respondents were asked how the NPSP impacts certain Navy organizational outcomes such as improving QOL, readiness, and retention. Program impacts on these outcomes for the parenting classes and home visiting services are indicated in Table 8.

Table 5. New Parent Support Program—Program Quality Measures

			- Adam and a	ID	·			
	I×	SD	Don't know N/A	Much worse than expected	Worse than expected	As expected	Better than expected	Much better than expected
Parenting classes							9	
Hours	3.81	0.85	3.7% (16)	0.5% (2)	1.6% (7)	38.7% (169)	31.1% (136)	24.5% (107)
Facilities	3.86	0.85	2.3% (10)	0.5% (2)	1.6% (7)	35.5% (154)	33.6% (146)	26.5% (115)
Range of services	4.13	0.83	2.3% (10)	0.2% (1)	1.2% (5)	23.1% (100)	34.9% (151)	38.3% (166)
Customer service	4.31	0.79	2.5% (11)	0.0% (0)	0.5% (2)	18.9% (82)	28.4% (123)	49.7% (215)
Quality of services	4.28	0.78	1.4% (6)	0.2%(1)	0.0% (0)	18.7% (81)	32.9% (143)	46.8% (203)
Home visiting services								
Hours	4.10	0.88	6.5% (13)	0.5% (1)	0.5% (1)	27.4% (55)	26.4% (53)	38.8% (78)
Facilities	3.86	0.97	13.2% (26)	1.5% (3)	3.2% (7)	27.4% (54)	27.4% (54)	26.9% (53)
Range of services	4.29	0.79	1.0% (2)	0.5% (1)	0.0% (0)	17.9% (35)	32.8% (64)	47.7% (93)
Customer service	4.44	92.0	1.5% (3)	0.5% (1)	0.0% (0)	13.4% (27)	26.2% (53)	58.4% (118)
Quality of services	4.46	0.77	0.5% (1)	1.0% (2)	0.0% (0)	10.9% (22)	28.2% (57)	59.4% (120)

Note. Number of respondents in parentheses.

Table 6. New Parent Support Program—Program Specific Outcome Items

	cw ran	ddne m	ort rrogram—r	ivew ratem Support rrogram—rrogram specific Outcome frems	Outcome mems		
	1×	SD	No help at all	Not very much It has helped help somewhat	It has helped somewhat	It has helped quite a lot	It has helped a great deal
Parenting classes							
Feel a sense of community	4.07	0.92	1.6% (7)	3.4% (15)	19.8% (88)	37.2% (165)	38.1% (169)
Cope with parenting stress	4.25	0.82	0.7% (3)	0.7% (3)	17.7% (79)	34.7% (155)	46.3% (207)
Improve parenting skills	4.07	0.88	1.3% (6)	1.6% (7)	22.5% (100)	38.4% (171)	36.2% (161)
Home visiting services							
Feel a sense of community	4.22	0.85	0.5% (1)	2.8% (6)	16.4% (35)	34.6% (74)	45.8% (98)
Cope with parenting stress	4.44	0.70	0.5% (1)	0.9% (2)	6.6% (14)	38.0% (81)	54.0% (115)
Improve parenting skills	4.29	0.73	0.0% (0)	1.9% (4)	10.8% (23)	44.1% (94)	43.2% (92)

Note. Number of respondents in parentheses.

Table 7. New Parent Support Program—Reason for Being Items

			0)		
	X	SD	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Parenting classes							
Concentrate	3.83	0.83	0.4% (2)	2.5% (11)	34.5% (154)	38.7% (173)	23.9% (107)
Concern	4.51	0.611	0.0% (0)	0.4% (2)	4.8% (22)	38.0% (173)	56.7% (258)
Health	4.37	99.0	0.0% (0)	0.7% (3)	7.9% (36)	44.8% (203)	46.6% (211)
Home visiting services							
Concentrate	4.04	0.81	0.5% (1)	0.9% (2)	25.5% (54)	40.6% (86)	32.5% (69)
Concern	4.61	0.56	0.5% (1)	0.0% (0)	0.9% (2)	35.6% (77)	63.0% (136)
Health	4.52	0.60	0.9% (2)	0.0% (0)	2.8% (6)	39.8% (86)	56.5% (122)

Note. Number of respondents in parentheses.

Table 8. New Parent Support Program—Active Duty Organizational Outcome Items

	X	SD	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Parenting classes		के कुत्र कुने के मान्य में के कि स्थान					
Readiness	3.99	0.88	0.7%(1)	3.5%(5)	24.1% (34)	39.0% (55)	32.6% (46)
Retention plans	3.40	0.73	0.7% (1)	0.0% (0)	(66) %2'69)	17.6% (25)	12.0% (17)
Quality of life	4.23	0.74	0.0% (0)	1.4% (2)	14.1% (20)	44.4% (63)	40.1% (57)
Home visiting services							
Readiness	4.07	0.75	0.0% (0)	1.3%(1)	21.1% (16)	47.4% (36)	30.3% (23)
Retention plans	3.43	0.84	2.7% (2)	1.3% (1)	60.0% (45)	22.7% (17)	13.3% (10)
Quality of life	4.29	0.63	0.0% (0)	0.0% (0)	9.1% (7)	53.2% (41)	37.7% (29)

Note. The mean may range from a score of one to five, where five would represent the highest rating (i.e., strongly agree). The one would represent the lowest rating (i.e., strongly alsagree).

Multiple Regression Analyses

Multiple regression analyses were used to determine if RFB items and the mean score for program quality predict quality of life, readiness, and retention plans (see Table 9). Results indicate that the RFB items *Concentrate* and *Concern* were the strongest predictors of QOL and retention plans (i.e., remain). *Concentrate* and *Health and Safety* were the strongest predictors of readiness.

There is a marked difference in the amount of variance accounted for when comparing the various models. A large proportion of variance was accounted for in predicting Readiness (50%) and QOL (49%) in contrast to the variance accounted for in predicting retention plans (23%). Additionally, a comparison among predictors indicated that the weight of the standardized coefficients *Concentrate* was the overall strongest predictor (for readiness, retention plans, and QOL).

Table 9. New Parent Support Program—Multiple Regression Analysis: Relationship of Program to Readiness, Retention Plans, and QOL

Model and Components/Variables	В	β
Contributes to my overall readiness ^a		·
Contributes to health and safety	.242	.179*
Concern for Sailors and their families	.155	.113
Program helps me concentrate on my job	.442	.496*
Mean score of program quality items	.051	.042
Positively affects my retention plans ^b		
Contributes to health and safety	.083	.067
Concern for Sailors and their families	.317	.251*
Program helps me concentrate on my job	.206	.251*
Mean score of program quality items	.010	.010
Contributes to my overall quality of life ^c		
Contributes to health and safety	.140	.118
Concern for Sailors and their families	.266	.222*
Program helps me concentrate on my job	.333	.428*
Mean score of program quality items	.098	.091

 $^{^{}a}n = 214; R^{2} = .497; F (4, 210) = 51.84**$ $^{b}n = 215; R^{2} = .226; F (4, 211) = 15.42**$ $^{c}n = 215; R^{2} = .488; F (4, 211) = 50.34**$

^{*}p < .05

^{**}p<.01

Sexual Assault Victim Intervention Program

Characteristics of Participants

The following results were obtained from a total sample of 503 participants. Table indicates the number of surveys returned by region. Participants included 86 percent (n = 417) active duty Navy Service members, 4 percent (n = 20) spouses of active duty Navy Service members, 2 percent (n = 8) other active duty Service members, 1 percent spouses of other active duty Service members (n = 4), 5 percent DoD civilians (n = 26), 1 percent retirees (n = 4), and 1 percent (n = 5) other respondents. Sixty-seven percent of the SAVI respondents lived in civilian housing, 17 percent lived in base housing, 5 percent lived in military housing off base, 4 percent lived in bachelor quarters, and 3 percent lived aboard ship at the time of the survey.

Table 10.
Sexual Assault Intervention Program—Number of Surveys Returned by Region

Region	Number of surveys returned
Europe	61
Guam	45
Hawaii	25
Japan	56
Mid-Atlantic	89
Midwest	21
Northwest	49
Southeast	110
Southwest	4
South Texas	22

Note. There were 21 missing locations, and 2 locations for which there is not a SAVI program (Charleston Naval Weapons Station)

Characteristics of the Sexual Assault Victim Intervention Program

Respondents indicated which components of the SAVI Program they had used or been a part of (Table 11). In addition, respondents were asked to indicate the primary reason for participating in the SAVI Program (see Table 12).

Table 11.
Sexual Assault Victim Intervention Program—Program Components Represented

	Number of Respondents	% of Respondents
Sexual assault prevention/GMT	189	40.7%
Advocate Services	230	49.6%
Other ^a	45	9.7%

Written responses for the other category include professional providers: nurse examiner n = 1, criminal investigator n = 2, trained SAVI providers: POC n = 5, counseling services n = 9, victim services n = 1, data collection n = 1, advocates/advisors n = 3, coordinators n = 1, committee members, n = 1, and GMT services: indoctrination n = 4, training/student n = 3.

Table 12.
Sexual Assault Victim Intervention Program—Primary Reasons for Participating in SAVI Program

	Number of Respondents	% of Respondents
Command referral	131	28.8%
Personal interest/self-referral	221	48.6%
Other	103	22.6%

Respondents were asked if "victim's rights" and a victim advocate were offered when they first contacted the SAVI program. Table 13 indicates the frequency of these services being offered. When asked if the crime was reported formally, 80 percent (n = 68) of respondents indicated that the crime was reported, and 20 percent (n = 17) indicated that it was not. Table 14 indicates the reasons why the crime was not reported.

Table 13.
Sexual Assault Victim Intervention Program—Services Offered

	Yes	No
Were "victim's rights" offered by a first responder	89.0% (81)	11.0% (10)
Was a victim advocate offered immediately	87.4% (76)	12.6% (11)

Table 14.
Sexual Assault Victim Intervention Program—Reasons Why the Sexual Assault Not Reported Formally

	Number of Respondents	% of Respondents
Fear of reprisal by offender	4	0.8%
Fear of reprisal by superiors	4	0.8%
Fear of reprisal by peers	3	0.6%
Fear of adverse effect on career advancement	2	0.4%
Fear of not being believed by others	7	1.4%
Did not want others to know of assault	9	1.8%
Embarrassment	6	1.2%
Desire to avoid retelling or defending victim's actions	4	0.8%
Unknown	3	0.6%
Other	4	0.8%

Note. Multiple responses allowed.

Program Quality

Overall the responses to the program quality measures were positive. The majority of participants rated the various aspects of program quality as being *much better* or *better than they expected*. Program quality ratings for the prevention presentation/GMT and advocacy services components are indicated in Table 15.

Table 15. Sexual Assault Victim Intervention Program—Program Quality Measures

	Ι×	SD	Don't know N/A	Much worse than expected	Worse than expected	As expected	Better than expected	Much better than expected
Prevention presentation/GMT								
Hours	3.95	0.92	9.8% (18)	1.1% (2)	1.1% (2)	30.6% (56)	25.7% (47)	31.7% (58)
Facilities	3.79	0.95	13.3% (24)	1.7% (3)	2.2% (4)	33.1% (60)	25.4% (46)	24.3% (44)
Range of services	4.09	0.87	6.6% (12)	0.0% (0)	1.1% (2)	28.0% (51)	25.8% (47)	38.5% (70)
Customer service	4.19	0.87	8.9% (16)	0.0% (0)	1.1% (2)	23.9% (43)	22.8% (41)	43.3% (78)
Quality of services	4.20	0.87	11.0% (20)	0.0% (0)	1.1% (2)	23.1% (42)	22.0% (40)	42.9% (78)
Advocacy services								
Hours	3.82	0.91	6.6% (15)	1.3% (3)	1.3% (3)	36.3% (82)	27.9% (63)	26.5% (60)
Facilities	3.72	0.89	3.1% (7)	1.8% (4)	1.8% (4)	39.6% (89)	32.0% (2)	21.8% (49)
Range of services	4.12	0.80	2.2% (5)	0.4% (1)	0.9% (2)	20.5% (46)	40.2% (90)	35.7% (80)
Customer service	4.26	0.76	3.1%(7)	0.0% (0)	0.0% (0)	18.2% (41)	35.1% (79)	43.6% (98)
Quality of services	4.27	0.72	2.7% (6)	0.0% (0)	0.4% (1)	13.8% (31)	41.8% (94)	41.3% (93)
West N. 194								

Note. Number of respondents in parentheses.

Program Specific Outcomes

Participants were asked three questions about how the program helped them with outcomes that are specific to the program. The impact of these program specific outcomes (i.e., helping with the problem that brought the respondent to SAVI and helping them to cope with the sexual trauma in an appropriate way) for the prevention presentation/GMT and advocacy services components are indicated in Table 16.

Reasons for Being (RFB) Outcomes

Participants were asked additional questions about how the SAVI Program helps them with the program RFB (i.e., allows me to concentrate on my job, shows concern for members and their families, and contributes to the health and safety of Sailors and their families). The impacts of these program RFB outcomes for the prevention presentation/GMT and advocacy services components are indicated in Table 17.

Organizational Outcomes

Active duty Navy respondents were asked how the SAVI Program impacts certain Navy organizational outcomes such as improving quality of life, readiness, and retention. Program impact on these outcomes for the prevention presentation/GMT and advocacy services components are indicated in Table 18.

Multiple Regression Analysis

Multiple regression analyses were used to determine if RFB items and the mean score for program quality predict readiness, retention plans, and quality of life (see Table 19). Results indicate that the RFB items *Health and Safety* and *Concentrate* were the strongest predictors of readiness and QOL. The mean score of program quality and *Concentrate* were the strongest predictors for retention plans.

There is a marked difference in the amount of variance accounted for when comparing the various models. A large proportion of variance was accounted for in predicting readiness (63%) and QOL (52%) in contrast to the variance accounted for in predicting retention plans (12%). Additionally, a comparison among predictors indicated that the weight of the standardized coefficients *Concentrate* was the overall strongest predictor for readiness. In addition, *Contribute* was a strong predictor for QOL.

Sexual Assault Victim Intervention Program—Program Specific Outcome Items Table 16.

	X	SD	No help at all	Not very much help	It has helped somewhat	Not very much It has helped It has helped It has helped help somewhat quite a lot a great deal	It has helped a great deal
Prevention presentation/GMT							
Helped with original problem	4.11	1.09	2.8%(1)	11.1% (4)	2.8% (1)	38.9% (14)	44.4% (16)
Helped cope with sexual assault	3.97	1.08	0.0% (0)	12.9% (4)	19.4% (6)	25.8% (8)	41.9% (13)
Advocacy services							
Helped with original problem	4.16	0.87	0.0%(0)	2.0% (1)	24.0% (12)	30.0% (15)	44.0% (22)
Helped cope with sexual assault	4.36	0.71	0.0% (0)	0.0% (0)	12.8% (5)	38.5% (15)	48.7% (19)

Note. Number of respondents in parentheses.

Table 17. Sexual Assault Victim Intervention Program—Reason for Being Items

	X	SD	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Prevention presentation/GMT							
Concentrate	3.72	0.94	2.1% (4)	4.3% (8)	35.6% (67)	35.1% (66)	22.9% (43)
Concern	4.64	0.55	0.5% (1)	0.0% (0)	0.5% (1)	33.2% (62)	65.8% (123)
Health	4.50	0.71	1.1% (2)	1.1% (2)	2.7% (5)	37.4% (70)	57.8% (108)
Advocacy services							
Concentrate	3.58	0.93	2.6% (6)	4.8% (11)	42.5% (97)	32.0% (73)	18.0% (41)
Concern	4.67	0.58	0.0% (0)	0.9% (2)	3.0% (7)	24.3% (56)	71.7% (165)
Health	4.61	0.56	0.0% (0)	0.4% (1)	2.6% (6)	32.6% (75)	64.3% (148)

Note. Number of respondents in parentheses.

Sexual Assault Victim Intervention Program—Active Duty Organizational Outcome Items Table 18.

	X	SD	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Prevention presentaton/GMT							
Readiness	3.95	0.84	0.6% (1)	1.9% (3)	27.8% (44)	41.1% (65)	28.5% (45)
Retention plans	3.25	0.74	3.2% (5)	0.6%(1)	71.5% (113)	17.1% (27)	7.6% (12)
Quality of life	4.27	0.78	0.6%(1)	1.3% (2)	12.6% (20)	41.5% (66)	44.0% (70)
Advocacy services							
Readiness	4.11	0.88	1.5% (3)	2.1% (4)	18.5% (36)	40.0% (78)	37.9% (74)
Retention plans	3.33	99.0	1.0% (2)	0.5% (1)	71.0% (137)	19.2% (37)	8.3% (16)
Quality of life	4.39	0.74	0.0% (0)	1.5% (3)	10.6% (21)	34.8% (69)	53.0% (105)

Note. The mean may range from a score of one to five, where five would represent the highest rating (i.e., strongly agree). The one would represent the lowest rating (i.e., strongly disagree).

Table 19. Sexual Assault Victim Intervention Program—Multiple Regression Analysis: Relationship of Program to Readiness, Retention Plans, and QOL

Model and Components/Variables	В	β
Contributes to my overall readiness ^a		
Contributes to health and safety	.300	.202*
Concern for Sailors and their families	.132	.081
Program helps me concentrate on my job	.443	.482*
Mean score of program quality items	.085	.069
Positively affects my retention plans ^b		
Contributes to health and safety	.151	.127*
Concern for Sailors and their families	.015	.013
Program helps me concentrate on my job	.127	.172*
Mean score of program quality items	.180	.180*
Contributes to my overall quality of life ^c		
Contributes to health and safety	.555	.406*
Concern for Sailors and their families	.218	.154*
Program helps me concentrate on my job	.272	.324*
Mean score of program quality items	.103	.090*
^a $n = 348$; $R^2 = .63$; $F(4, 344) = 59.49*$ ^b $n = 346$; $R^2 = .12$; $F(4, 342) = 12.13*$ ^c $n = 351$; $R^2 = .52$; $F(4, 347) = 95.49*$ * $p < .05$		

Summary

The present program evaluation is based on survey data obtained on two QOL programs: NPSP and SAVI program. In the first part of this section, patrons' ratings of program quality (i.e., hours, facilities, range of services/programs, customer service, and quality of service), program specific outcomes, more global program objectives (i.e., RFB), and mission-related outcomes (e.g., QOL, readiness, and retention) are discussed for each program. Next, the strengths and weaknesses of the present evaluation are discussed, followed by study conclusions.

New Parent Support Program (NPSP)

The majority of NPSP patrons (61%) were attending parenting classes. Approximately 30 percent of NPSP parents were taking part in the home visiting services. Because the ways in which NPSP services were delivered differed in important ways, program quality, program specific outcomes, and RFB items are summarized separately for patrons who took part in these two components of the NPSP program.

The quality of the NPSP exceeded most patrons' expectations. Specifically, among program users who took part in parenting classes, 56 percent reported that the program hours were much better than expected or better than expected. Sixty percent rated the facilities as much better than expected or better than expected. Seventy-three percent of respondents rated the range of services as much better than expected or better than expected. Seventy-eight percent of program users rated customer service as much better than expected or better than expected. In addition, 80 percent of respondents rated the quality of services as much better than expected or better than expected.

Patrons who took part in the NPSP home visiting services were also very satisfied with the quality of services. Specifically, among program users who took part in parenting classes, 65 percent reported that the program hours were much better than expected or better than expected. Fifty-four percent rated the facilities as much better than expected or better than expected. Eighty-one percent of respondents rated the range of services as much better than expected or better than expected. Eighty-five percent of program users rated customer service as much better than expected or better than expected. In addition, 88 percent of respondents rated the quality of services as much better than expected or better than expected.

The NPSP questionnaire contained three items that assessed program specific outcomes. Program specific outcome items assessed the program's ability to help respondents feel a sense of community, cope with parenting stress, and improve parenting skills. Specifically, of the patrons who took part in the parenting classes, 75 percent stated that the program increased their sense of community a great deal or quite a lot. Similarly, the majority of respondents (81%) reported that the program increased their ability to cope with parenting stress a great deal or quite a lot. In addition, 75 percent stated that the program had improved their parenting skills a great deal or quite a lot. Eighty percent of respondents who took part in the home visiting services believed that the program increased their sense of community a great deal or quite a lot, and 92 percent believed that the program had increased their ability to cope with parenting stress a great deal or quite a lot. Of patrons who took part in the home visiting services offered by NPSP, 87 percent believed that the program improved their parenting skills a great deal or quite a lot.

The majority of NPSP users believed the services contributed to the overarching program goals—i.e., Reason for Being items. Specifically, of the respondents who took part in the parenting classes, 63 percent strongly agreed or agreed that the program allowed the Service member to concentrate more on their job/duties, 95 percent strongly agreed or agreed that the program was one way the Navy could show Concern for Sailors and their Families, and 91 percent of patrons strongly agreed or agreed that the program contributes to the health and safety of Sailors and their families. Among NPSP patrons who took part in the home visiting services, 73 percent strongly agreed or agreed with the statement that the program allowed the Service member to concentrate more on their job/duties. Ninety-nine percent of respondents strongly agreed or agreed that the program was one way the Navy could show Concern for Sailors and their Families. Ninety-six percent of respondents strongly agreed or agreed that the NPSP program contributed to the health and safety of Sailors and their families.

With respect to overall QOL, active duty patrons who took part both in the parenting classes and the home visiting services perceived NPSP services as contributing to their overall Quality of Life. Specifically, 85 percent of active duty patrons who took part in parenting classes strongly agreed or agreed that the program contributed to their quality of life in the military. Ninety-one percent of respondents who took part in the NPSP home visiting services strongly agreed or agreed that the program contributed to their QOL.

Most NPSP patrons were spouses of active duty personnel and were not asked to complete the items that assessed the program's impact on military outcomes. It should be noted, however, that active duty personnel who took part in NPSP services generally believed the program contributed to these aspects of the program's goals. Specifically, among active duty patrons who took part in the NPSP parenting classes, 72 percent strongly agreed or agreed that the program increased their overall readiness (i.e., the extent to which I am prepared, able, and motivated to perform my job). Thirty percent of NPSP parenting class patrons strongly agreed or agreed that the program affected their decision to remain in the Navy. Seventy-eight percent of NPSP patrons who took part in the home visiting services strongly agreed or agreed that the program users who took part in the home visiting services strongly agreed or agreed that the program affected their decision to remain in the Navy.

Overall, program users' evaluation of the NPSP was very favorable. While ratings were high for all aspects of NPSP quality, items that assessed the range of services, customer services, and quality of services were rated more favorably than were program facilities. NPSP patrons who participated in home visiting services rated program hours slightly more favorably than did patrons who took part in NPSP parenting classes. This difference is understandable given the convenience of home visiting services for parents who have very young children.

The overwhelming majority of respondents believed the program positively impacted their QOL, helped the Service member concentrate more on their job/duties, increased their sense of community, was one way the military could show concern for families, and contributed to the health and safety of Sailors and their families. Moreover, more than three-quarters of NPSP program users believed that the program increased their sense of community, added to their ability to cope with parenting stress, and improved their parenting skills. Active duty personnel who took part in the NPSP generally believed the program contributed to their overall readiness. In addition, approximately one-third of active duty respondents believed NPSP services positively impacted their likelihood of staying in the military. These results clearly demonstrate

that program users perceive NPSP services very favorably and NPSP services are viewed as highly effective.

Although every branch of the military now offers parent support programs, little empirical research has evaluated these programs. To our knowledge, only two previous evaluations have examined the effectiveness of parenting programs offered to military personnel and their spouses. The prior research differed substantially from the present research in that the first evaluation was designed to prevent child abuse (Thompson et al., 1997); the second evaluation was also designed to prevent child abuse, but participants in the Thompson et al. study were active duty personnel who had committed child abuse and their spouses (Mollerstrom et al., 1995). Although NPSP patrons who took part in the present evaluation were fundamentally different from respondents who took part in the Mollerstrom et al. survey, both evaluations demonstrated very clear benefits of a parenting program for military families. Approximately 80 to 90 percent of NPSP patrons in the present evaluation found the program increased their ability to cope with parenting stress and improved their parenting skills. These results are comparable to Mollerstrom et al. who reported that 80.4 percent of parents labeled as offenders and 86.4 percent of the spouses found the Family Advocacy Program services helpful. These results also indicate that families have preferences for different types of services; however, regardless of the type of services or location of the service, parent training is viewed as beneficial.

Results from the present evaluation support considerable previous research conducted with civilian parents. For instance, Anastopoulos and colleagues (1993) found civilian parents who attended a parenting program reported the program reduced their parenting stress. Similarly, the majority of NPSP parents surveyed in the present evaluation believed the program reduced their parenting stress. NPSP services not only reduced parenting stress, the overwhelming majority of program users believed the program improved parenting practices. It is important to note that training parents in skills that are beneficial to family life may improve parents' ability to buffer the risks to which their children are exposed (see Harachi et al., 1997 for a review). For instance, skills training has been shown to enable parents to avoid ineffective family management behaviors that can directly increase children's risk for problem behaviors (Farrington & Hawkins, 1991). Viewed from a family systems framework, positive parenting self-efficacy (i.e., a belief that one is knowledgeable and able to be an effective parent) and positive parent-child interactions may reinforce working parents' desire to be involved in all aspects of the family life (e.g., Aldous, Mulligan, & Bjarnason, 1998). Moreover, infancy and early childhood are critical periods for establishing men's active participation throughout their children's lives (Woodworth, Belsky, & Crnic, 1996).

Mishik and Ferry (1992) argued that child advocacy can affect military readiness because child abuse and neglect can affect manpower losses. They also contend that child advocacy programs are cost effective because they reduce use of medical, legal, police, and supportive agencies. Approximately three-quarters of active duty NPSP program users believed the program increased military readiness (i.e., the extent to which I am prepared, able, and motivated to perform my job). In addition, approximately one-third of respondents believed the program increased the likelihood that they would remain in the military. Research is needed to examine the long-term effectiveness of NPSP services on parenting skills, child outcomes, as well as the cost effectiveness of these types of child advocacy programs for military outcomes. However, these findings suggest that parenting programs designed to provide basic knowledge of child development and increase parenting skills may increase Service member readiness. Moreover,

these findings suggest that support programs that influence family well being may positively impact the Service member's ability to perform their job and, for some participants, increase Service member commitment.

New Parent Support Program—Multiple Regression Analyses

Separate multiple regression analyses were conducted to examine relationships between the RFB items (Contributes to Health and Safety, Show Concern for Sailors and their Families, Program Helps Me Concentrate on my Job/Duties) and the Mean Rating of Program Quality, QOL, Readiness, the degree to which the program Impacted the Decision to Remain in the Navy, and Career Intentions. Three of the four predictors significantly contributed to respondents' QOL. That is, higher ratings on two of the three RFB items (e.g., Show Concern for Sailors and their Families, and Program Helps Me Concentrate on my Job/Duties), predicted patrons' ratings of the degree to which the program enhanced QOL.

In the multiple regression analysis with Readiness as the dependent variable, two of the three RFB items independently contributed to the prediction of Readiness. Significant predictors were Shows Concern for Sailors and their Families and Program helps me Concentrate on my Job. Results of the regression analysis, with Service members' decision to remain in the Navy as the dependent variable, revealed that active duty program users' ratings of Concern for Sailors and their Families and Program helps me Concentrate on my Job predicted Service members' decision to remain in the Navy. Interestingly, a change in intentions (i.e., this Program has had an Impact on my Decision to Remain in the Navy), was predicted by the program's ability to increase Concentration. Thus, a program that allows the Sailor to Concentrate on their job by reducing family distractions appears to have an immediate impact on their decision to remain in the military. Moreover, it appears that this type of comprehensive family program offered by the Navy increases QOL and may contribute to Service member's commitment to a Navy career.

Previous research suggests that job satisfaction and job commitment are factors that lead to the decision to stay in the military (e.g., Farkas & Tetrick, 1989; Kelley et al., 2001; Kim, Price, Mueller, & Watson, 1996). In the case of military families with young children, it is possible that the knowledge and skills taught as part of NPSP services may benefit the family environment by improving parental communication, reducing stress, and facilitating positive parent-child interactions. These skills may benefit children's adjustment as well as the family unit. Thus, satisfaction with the program per se, may not lead directly to a change in career intentions immediately. Instead, over time the impact of the program on Service member and spouse satisfaction and the Sailor's ability to perform his or her duties, job satisfaction, and career commitment may contribute to retention.

Sexual Assault Victim Intervention Program (SAVI)

The majority of SAVI patrons took part in sexual assault prevention presentations (41.7%) or advocate services (49.6%). The most helpful aspects of the SAVI program were personal victim advocate/companion, information and referral to community/base resources, and prevention information. SAVI has two primary components, a prevention/training component and an advocacy component. The prevention/training component involves education to all military and civilian personnel through presentations, general military education, training of SAVI advocates, and increased sexual assault awareness. The advocacy component provides the victims of sexual

assault with professionally trained advocates who can provide information and emotional support and help guide victims through the various medical, legal, and investigative processes. Because the primary services are fundamentally different, program quality, program specific outcomes, and RFB items are summarized separately for patrons who took part in these two components of the SAVI program.

Patrons who attended SAVI presentations were very satisfied with the quality of the presentations. Specifically, 57 percent of patrons who attended SAVI presentations rated the program hours as much better than expected or better than expected. Fifty percent of respondents who attended SAVI presentations rated the facilities as much better than expected or better than expected. Sixty-four percent rated the range of services as much better than expected or better than expected. Sixty-six percent rated customer services as much better than expected or better than expected. In addition, 65 percent of respondents rated the quality of services as much better than expected or better than expected.

Patrons who took part in SAVI advocate services were also satisfied with all aspects of program quality. Specifically, 54 percent of individuals who took part in advocacy services rated program hours as much better than expected or better than expected. Fifty-four percent of respondents who attended SAVI presentations rated the facilities as much better than expected or better than expected. Seventy-six percent rated the range of services as much better than expected or better than expected. Seventy-nine percent rated customer services as much better than expected or better than expected. In addition, 83 percent of respondents rated the quality of services as much better than expected or better than expected.

The QOL assessment questionnaire contained two program-specific outcome items. It is important to note that program-specific outcome items were answered by patrons who were attending a presentation and had participated in SAVI counseling services. In response to the question, "To what extent has this program helped you with the problem that originally brought you here?", 83 percent of patrons who had attended the SAVI presentation and participated in counseling services believed the program had helped a great deal or helped quite a lot with the problem that originally brought them to the program. Sixty-eight of patrons who attended the SAVI presentation and had participated in counseling services believed the program helped them cope with sexual trauma a great deal or quite a lot. In response to the question, "To what extent has this program helped you with the problem that originally brought you here?", 74 percent of patrons who had participated in advocacy services believed the program had helped a great deal or helped quite a lot with the problem that brought them to the program originally. Eighty-seven percent of patrons who were participating in advocacy services believed the program helped them cope with sexual assault a great deal or quite a lot.

The overwhelming majority of program users believed the SAVI presentations contributed to the overall program goals – RFB items. Specifically, among program users who participated in a SAVI presentation, 86 percent *strongly agreed* or *agreed* with the statement that the program contributed to their QOL in the military. Eighty-eight percent of patrons who had taken part in SAVI advocate services *strongly agreed* or *agreed* that the program contributed to their QOL in the military.

The majority of program users who attended SAVI presentations believed the services contributed to the overarching program goals – RFB items. Specifically, of the respondents who took part in the SAVI presentations, 58 percent *strongly agreed* or *agreed* that the program

allowed the Service member to concentrate more on their job/duties, 99 percent strongly agreed or agreed that the program was one way the Navy could show Concern for Sailors and their Families, and 91 percent of patrons strongly agreed or agreed that the program contributes to the health and safety of Sailors and their families. Among SAVI patrons who took part in the advocacy services, 50 percent strongly agreed or agreed with the statement that the program allowed the Service member to concentrate more on their job/duties. Ninety-six percent of SAVI advocacy services patrons strongly agreed or agreed that the program was one way the Navy could show Concern for Sailors and their Families. Ninety-seven percent of advocacy clients strongly agreed or agreed that the SAVI program contributed to the health and safety of Sailors and their families.

Seventy percent of patrons who took part in SAVI presentations strongly agreed or agreed that the program facilitated readiness. Twenty-five percent strongly agreed or agreed that SAVI impacted their decision to stay in the military. Among users who had taken part in SAVI advocacy services, 78 percent strongly agreed or agreed that the SAVI services they had taken part in facilitated their ability to do their job (i.e., readiness). Twenty-eight percent of respondents who had taken part in SAVI advocacy services strongly agreed or agreed that SAVI had impacted their decision to stay in the military.

Many Sailors have personal characteristics and engage in behaviors that place them at risk for sexual victimization (e.g., young age, being single, alcohol use), and in the case of some Sailors, they enter the military with a history of sexual victimization. Importantly, evaluations of the SAVI training and advocacy services were very favorable. Range of services, customer service, and quality of services items were rated more favorably than program hours and program facilities. Perhaps due to the personal nature of advocacy services and that attendance at SAVI prevention/training may be mandatory, range of services, customer service, and quality of services were rated slightly more favorably among clients who took part in advocacy services than for individuals who attended SAVI presentations.

The majority of program users who had taken part in counseling services offered by SAVI believed the services contributed to the program specific outcome items (i.e., "helped them with the problem that originally brought them there", "helped them cope with sexual trauma"). Because little previous research has examined perceptions of sexual assault prevention or intervention services for military personnel, it is not possible to compare these results to those of previous investigations.

Patrons overwhelmingly believed that SAVI was one way the Navy shows concern for sailors and their families and contributes to the health and safety of Sailors and their families. These results clearly demonstrate that SAVI is meeting its specific program goals. More globally, these findings demonstrate to Sailors and their family members that the military recognizes common social problems that can affect a Sailor's quality of life, and impact military outcomes. Patrons were split with respect to whether SAVI services facilitated the Service member's ability to concentrate on their job. This finding is not especially surprising given that attending a presentation about sexual assault awareness and the availability and scope of SAVI services is not directly related to job performance.

Sexual Assault Victim Invention—Multiple Regression Analyses

Results also demonstrated that ratings of SAVI program quality, and patrons' ratings of the degree to which the program contributed to health and safety of Sailors and their families, showed concern for Sailors and their families, and helped Sailors concentrate on their job, predicted the impact of the program on QOL. This finding suggests that the quality of SAVI services, combined with the patrons' perceptions of how these programs contribute to the overarching program goals (i.e., RFBs), contribute to program users' quality of life in the military. Thus, program quality is not irrelevant, but instead significantly impacts patrons' perceptions of the effectiveness of SAVI services. In addition, the degree to which the program contributed to health and safety and helped the Service member concentrate on their job, predicted Service member readiness. It is important to note that the magnitude of these relationships were large (e.g., Cohen, 1988).

The multiple regression analyses also revealed that program quality and two of the three RFB statements (i.e., patrons' ratings of the degree to which the program contributed to health and safety of Sailors and helped Sailors concentrate on their job) predicted how well the program impacted intentions to remain in the military. The regression predicting overall career intentions from program quality and SAVI RFB items was not significant.

Strengths and Limitations of the Present Study

The present research has several strengths that should be highlighted. Most notably, this research study used a common metric to evaluate different types of QOL programs. For the first time, QOL program managers and resource sponsors are able to compare different types of programs on the degree to which they meet QOL objectives – program RFB. Importantly, program managers reviewed each (equally weighted) program objective. Those program objectives fundamental to a particular QOL program were selected as program metrics.

In addition, the survey questionnaire is brief and easy to administer. The surveys only include questions that are essential to evaluating the QOL programs and their impact on military outcomes. Also, respondent social security numbers (SSN) were requested on each survey. In the future, respondent SSN can be linked to patron survey data and personal data in the enlisted and officer master records. Importantly, this type of survey instrument makes ongoing or periodic data collection viable.

Another strength of the data collection methodology is that briefings to QOL program managers were conducted to share the purpose of the research project, answer any questions, and train program workers on administering the program evaluation survey. In addition, refusal and cooperation rates were determined at each of the program sites. As can be seen in Appendix C, cooperation rates were very high (between 67 and 100%) for 23 of the 26 sites that participated in the NPSP evaluation. Cooperation rates also were high (between 68 and 100%) for 17 of 20 sites that participated in the SAVI survey. Participation in the present evaluation was especially notable given that participation was voluntary. At the same time, for program evaluations to be successful, program user participation must be high and representative of program patrons. Continued emphasis is needed to stress the importance of site and program user cooperation and to determine why particularly low participation took place in a very few locations.

Certain limitations of this investigation should also be noted. The present research did not evaluate the attitudes of non-program users and the impact that non-use has on QOL and military outcomes. The question of whether QOL programs have long-term benefits for Service members and their families would best be addressed by surveying comparable individuals who utilize versus those who do not utilize QOL programs. Moreover, most NPSP program users believed the program reduced their parenting stress and improved their parenting skills. Given the magnitude and seriousness of child abuse and neglect both in civilian and military populations, clearly, research that demonstrates long-term benefits of child advocacy programs for child and family outcomes is warranted. In addition, clearly, the goal of sexual assault prevention is to reduce the likelihood that clients will experience sexual assault either as victims or perpetrators. Thus, research is needed to determine whether the likelihood of these outcomes is reduced for individuals who take part in SAVI programs. In addition, the present methodology does not answer the question of how aware individuals are of the specific types of services offered or why individuals who may benefit from specific programs choose not to use them.

One potential criticism of these program evaluation measures is the use of self-report measures of personal readiness and reports of intentions to stay or leave the military. Although previous meta-analytic research (Hom, Carankias-Walker, Prussia, & Griffeth, 1992; Tett & Meyer, 1993) has indicated that intentions are important predictors of actual turnover, additional research examining actual retention behavior is needed. Importantly, the inclusion of respondent SSN will help Navy researchers validate the self-report measure of career intentions to the Sailor's actual retention behavior.

For the most part, the various QOL programs were reviewed separately. Future research should examine the degree to which participation in one type of QOL program may have secondary benefits for other issues experienced by Navy families. Also, future research should address whether participation in multiple types of QOL programs or participating in a single program more than once impacts Service member and family adjustment and military outcomes.

Conclusions

The quality of both the NPSP and the SAVI programs exceeded most program users' expectations. In particular, the range of services, quality of services, and customer service was overwhelmingly viewed as positive. Both programs meet their program specific goals and generally were perceived as meeting the overarching program goals—RFB items. Both programs were perceived as supporting military members and their families and contributing to QOL and Service member readiness. Moreover, the present findings suggest that programs, such as NPSP and SAVI, contribute to a Service member's intention to remain in the military, however, they have less impact on long-term career intentions. Although more sustained and longitudinal data collection would better elucidate the effectiveness of QOL programs over time, the present project provides an important initial step toward understanding program users' perceptions of specific QOL programs offered to Sailors and their families.

References

- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*, 20, 147-169.
- Abdulrehman, R. Y., & De Luca, R. V. (2001). The implications of childhood sexual abuse on adult social behavior. *Journal of Family Violence*, 16, 193-203.
- Acord, L. D. (1977). Child abuse and neglect in the Navy. Military Medicine, 142, 862-863.
- Aldous, J., Mulligan, G. M., & Bjarnason, T. (1998). Fathering over time: What makes the differences? *Journal of Marriage and the Family*, 60, 809-820.
- Alsop, N. H. (1996). Mediating factors in the long-term psychological and psychosexual adjustment of adult males and females sexually abused as children. Unpublished dissertation.
- Anastopoulos, A. D., Shelton, T. L., DuPaul, G. J., & Guevremont, D. C. (1993). Parent training for attention-deficit hyperactivity disorder: Its impact on parent functioning. *Journal of Abnormal Child Psychology*, 21, 581-596.
- Archer, R. P., & Cauthorne, C. V. (1986). A final report on an investigation of deployment related factors on performance and psychological adjustment. Office of Navy Research (Tech Report No. N00014-84-C-0666). Arlington, VA.
- Bagley, C., & Thurston, W. E. (1996). Understanding and preventing child sexual abuse: Vol. 2. Male victims, adolescents, adult outcomes and offender treatment. Great Britain: Arena.
- Barber, L. (2001). Parental beliefs, parenting style, and children's intellectual development. In E. L. Grigorenko, & R. J. Sternberg (Eds.), Family environment and intellectual functioning: A life-span perspective. (pp. 141-172). Mahwah, NJ, US: Lawrence Erlbaum Associates, Inc., Publishers.
- Barclay, D. R., & Houts, A. C. (1990). Parenting skills: A review and developmental analysis of training content. In W. O'Donohue & L. Krasner (Eds.), *Handbook of psychological skills training: Clinical techniques and applications (pp. 195-228)*. Boston: Allyn & Bacon.
- Bell, D. B., Stevens, M. L., & Segal, M. W. (1996). How to support families during overseas deployments: A sourcebook for service providers. U.S. Army Research Institute, Research Report 1687.
- Blaisure, K. R., & Arnold-Mann, J. (1992). Return and reunion: A psychoeducational program aboard U.S. Navy ships. *Family Relations*, 41, 176-185.
- Bourg, C., & Segal, M. W. (1999). The impact of family supportive policies and practices on organizational commitment to the Army. *Armed Forces & Society*, 25, 633-652.
- Bowen, G. L. (1986). Spouse support and the retention of Air Force members: A basis for program development. *Evaluation and Program Planning*, 9, 209-220.
- Bowen, G. L. (1989). Family factors and member retention: A key relationship in the work and family equation. In G. L. Bowen & D. K. Orthner (Eds.), *The organizational family: Work and family linkages in the U. S. military.* New York: Praeger Publishers.

- Brannon, J. M., Larson, B., & Doggett, M. (1989). The extent and origins of sexual molestation and abuse among incarcerated adolescent males. *International Journal of Offender Therapy and Comparative Criminology*, 33, 161-172.
- Bray, R. M., Camlin, C. S., Fairbank, J. A., Dunteman, G. H., & Wheeless, S. C. (2001). The effects of stress on job functioning of military men and women. *Armed Forces & Society*, 27, 397-417.
- Bray, R. M., Fairbank, J. A., & Marsden, M. E. (1999). Stress and substance use among military women and men. *American Journal of Drug & Alcohol Abuse*, 25, 239-256.
- Breitenbecher, K. H (2000). Sexual assault on college campuses: Is an ounce of prevention enough? *Applied & Preventive Psychology*, 9, 23-52.
- Breitenbecher, K. H., & Gidycz, C. A. (1998). An empirical evaluation of a program designed to reduce the risk of multiple sexual victimization. *Journal of Interpersonal Violence*, 13, 472-487.
- Breitenbecher, K. H., & Scarce, M. (2001). An evaluation of the effectiveness of a sexual assault education program focusing on psychological barriers to resistance. *Journal of Interpersonal Violence*, 16, 387-407.
- Bremner, J. D. Southwick, S. M., Johnson, D. R., Yehuda, R., & Charney, D. S. (1993). Childhood physical abuse and combat related Posttraumatic Stress Disorder in Vietnam veterans. *American Journal of Psychiatry*, 150, 235-239.
- Brewster, A. L., Nelson, J. P., & Hymel, K. P. (1998). Victim, perpetrator, family, and incident characteristics of 32 infant maltreatment deaths in the United States Air Force. *Child Abuse & Neglect*, 22, 91-101.
- Briere, J. (1998, August). Histories of violence and self-reported trauma symptomatology in female U. S. Navy recruits. American Psychological Association. San Francisco, CA.
- Briere, J., Evans, D., Runtz, M., & Wall, T. (1988). Symptomatology in men who were molested as children: A comparison study. *American Journal of Orthopsychiatry*, 58, 457-461.
- Briere, J., & Runtz, M. (1988). Symptomatology associated with childhood sexual victimization in a nonclincal adult sample. *Child Abuse & Neglect*, 12, 51-59
- Brown, G. R., & Anderson, B. (1991). Psychiatric morbidity in adult inpatients with childhood histories of sexual and physical abuse. *American Journal of Psychiatry*, 148, 55-61.
- Browne, A., & Finkelhor, 0, D. (1986). Impact of CSA: A review of the research. *Psychological Bulletin*, 99, 66-77.
- Bureau of Justice Statistics. (1994). Criminal victimization in the United States: 1973-92 trends. Rockville, MD: U.S. Department of Justice (No. NCJ0147006).
- Burnam, M. A., Meredith, L. S., Sherbourne, C. D., Valdez, R. B., & Vernez, G. (1992). *Army Families and Soldier Readiness*. Santa Monica, CA: RAND Corporation.
- Caliber Associates (2000). U.S. Navy Family Service Center Leadership Survey 2000. Department of the Navy.

- Catalano, R. J., Haggerty, K. P., Gainey, R. R., & Hoppe, M. J. (1995). Reducing parental risk factors for children's substance misuse: Preliminary outcomes with opiate-dependent parents. Substance Use & Misuse, 32, 699-721.
- Chu, J. A., & Dill, D. L. (1990). Dissociative symptoms in relation to childhood physical and sexual abuse. *American Journal of Psychiatry*, 147, 887-892.
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd Edition). Hillsdale, NJ: Lawrence Erlbaum Associates, 1988.
- Cook, K. S., Molm, L. D., & Yamagishi, T. (1993). Exchange relations and exchange networks: Recent developments in social exchange theory. In J. Berger, M. Zelditch, Jr. (Eds.), *Theoretical research programs: Studies in the growth of theory.* Stanford University Press.
- Coyle, B. S., Wolan, D. L., & Van Horn, A. S. (1996). The prevalence of physical and sexual abuse in women veterans seeking care at a veterans affairs medical center. *Military Medicine*, 161, 588-593.
- Crawford, S. L., & Fiedler, E. R. (1992). Childhood physical and sexual abuse and failure to complete military basic training. *Military Medicine*, 157, 645-648.
- Dansak, D. A. (1998). Childhood abuse and parental disorders reported by Navy outpatient mental health patients. *Mental Medicine*, 163, 510-514.
- Davis, T. C., Peck, G. Q., & Storment, J. M. (1993). Acquaintance rape and the high school student. *Journal of Adolescent Health*, 14, 220-224.
- DePanfilis, D., & Zuravin, S. J. (1999). Predicting child maltreatment recurrences during treatment. *Child Abuse & Neglect*, 23, 729-743.
- Department of Defense (1986). Family advocacy program (Directive 6400.1). Washington, DC: Author.
- Department of Defense (1992). Family advocacy program (Directive 6400.1). Washington, DC: Author.
- Department of Defense (1995). 1995 Department of Defense survey of health related behaviors among military personnel. Chapel Hill, NC: Research Triangle Institute.
- Department of Defense (1999). Fact sheet: Women in the military. Alexandria, VA: Defense Manpower Data Center.
- Department of Defense (2002). Select manpower statistics (11 January 2002). Available: http://www.navy.mil.
- Diana, M. (1998). Work environment, career, and family influences on the reenlistment intentions of Army soldiers. Unpublished doctoral dissertation, George Mason University, Fairfax, Virginia.
- Donovan, B. S., Pandlin-Riveras, E., Dowd, T. & Blake, D. D. (1996). Childhood factors and war zone stress in chronic PTSD. *Journal of Trauma Stress*, 9, 361-368.
- Dore, M. M., & Lee, J. M. (1999). The role of parent training with abusive and neglectful parents. Family Relations: Interdisciplinary Journal of Applied Family Studies, 48, 313-325.

- Dubanoski, R. A., & McIntosh, S. R. (1984). Child abuse and neglect in military and civilian families. *Child Abuse & Neglect*, 8, 55-67.
- Dumas, J. E. (1989). Treating antisocial behaviour in children: Child approaches. *Clinical Psychology Review*, 9, 197-222.
- Dunst, C. J., & Trivette, C. M. (1994). Aims and principles of family support programs. In C. J. Dunst, C. M. Trivette, & A. G. Deal (Eds.), Supporting & strengthening families: Methods, strategies and practices. Cambridge, MA: Brookline Books.
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25, 178-199.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75, 51-59.
- Eitzen, J. P., & Sawyer, R. G. (1997). Sexually transmitted diseases: Risk behaviors of female active duty recruits. *Military Medicine*, 162, 686-689.
- Engel, C. C., Engel, A. L., Campbell, S. J., McFall, M., Russon, J., & Katon, W. (1993). Posttraumatic stress disorder symptoms and precombat sexual and physical abuse in Desert Storm veterans. *Journal of Nervous and Mental Diseases*, 181, 683-688.
- Etheridge, R. (1989). Family factors affecting retention: A review of the literature. Alexandria, VA: U.S. Army Research Institute for the Behavioral Sciences.
- Faller, K. C. (1989). Characteristics of a clinical sample of sexually abused children: How boy and girl victims differ. *Child Abuse & Neglect*, 13, 281-291.
- Farkas, A. J., & Tetrick, L. E. (1989). A three-wave longitudinal analysis of the causal ordering of satisfaction and commitment on turnover decisions. *Journal of Applied Psychology*, 74, 855-868.
- Farrington, D. P., & Hawkins, J. (1991). Predicting participation, early onset, and later persistence in officially recorded offending. *Criminal Behaviour and Mental Health*, 1, 1-33.
- Felitti, V. J. (1991). Long-term medical consequences of incest, rape, and molestation. South Medical Journal, 84, 328-331.
- Feltey, K. M., Ainslie, J. J., & Geib, A. (1991). Sexual coercion attitudes among high school students: The influence of gender and rape education. *Youth & Society*, 23, 229-250.
- Finkelhor, D. (1990). Early and long-term effects of child sexual abuse: An update. *Professional Psychology: Research and Practice*, 21, 325-330.
- Fischer, G. J. (1992). Gender differences in college student sexual abuse victims and their offenders. *Annals of Sexual Research*, 5, 215-226.
- Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management*, 1, 39-53.
- Fontana, A., & Rosenheck, R. (1998). Duty-related and sexual stress in the etiology of PTSD among women veterans who seek treatment. *Psychiatric Services*, 49, 658-662.

- Forgatch, M. S., & DeGarmo, D. S. (1999). Parenting through change: An effective prevention program for single mothers. *Journal of Consulting & Clinical Psychology*, 67, 711-724.
- Fox, R. A., Platz, D. L., & Bentley, K. S. (1995). Maternal factors related to parenting practices, developmental expectations, and perceptions of child behavior problems. *Journal of Genetic Psychology*, 156, 431-441.
- Fry, R. (1993). Adult physical illness and childhood sexual abuse. *Journal of Psychosomatic Research*, 37, 89-103.
- George, W. H., Gournic, S. J., & McAfee, M. P. (1988). Perceptions of postdrinking female sexuality: Effects of gender, beverage choice, and drink payment. *Journal* of Applied *Social Psychology*, 18, 1295-1317.
- Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experiences in adulthood and prior victimization experiences: A prospective analysis. *Psychology of Women Quarterly*, 17, 5-29.
- Giles, M. K. (1997). Long-term consequences of sexual victimization and mediators of these consequences. Unpublished dissertation.
- Gold, S. N., Elhai, J. D., Lucenko, B. A., Swingle, J. M., & Hughes, D. M. (1998). Abuse characteristics among childhood sexual abuse survivors in therapy: A gender comparison. *Child Abuse & Neglect*, 22, 1006-1012.
- Gold, S. R., & Merrill, L. L. (1998, August). Rates and predictors of sexual revictimization in U.S. Navy women. American Psychological Association, San Francisco, CA.
- Gold, S. R., Milan, L. D., Mayall, A., & Johnson, A. E. (1994). A cross-validation study of the trauma symptom checklist: The role of mediating variables. *Journal of Interpersonal Violence*, 9, 12-26.
- Grace, G. L., & Steiner, M. B. (1978). Wive's attitudes and the retention of Navy enlisted personnel (pp. 42-56). In E. J. Hunter & D. Stephen Nice (Eds.), *Military families: Adaptation to Change*. New York: Praeger.
- Greene, D. M., & Navarro, R. L. (1998). Situation-specific assertiveness in the epidemiology of sexual victimization among university women. *Psychology of Women Quarterly*, 22, 589-604.
- Griffeth, J., Rakoff, S. H., & Helms, R. F. (1992). Family and other impacts on retention (Technical Report No. 951). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26, 463-488.
- Hall, G. C. N., Hirschman, R., Graham, J. R., & Zaragoza, M. (1993). Sexual aggression: Issues in etiology, assessment, and treatment. Series in applied psychology: Social issues and questions. Philadelphia, PA: Taylor & Francis.
- Hanson, K. A., & Gidycz, C. A. (1993). An evaluation of a sexual assault prevention program. Journal of Consulting and Clinical Psychology, 61, 1046-1052.

- Harachi, T. W., Catalano, R. F., & Hawkins, J. D. (1997). Effective recruitment for parenting programs within ethnic minority communities. *Child and Adolescent Social Work Journal*, 14, 23-39.
- Harrington, N. T., & Leitenberg, H. (1994). The relationship between alcohol consumption and victim behaviors immediately preceding sexual aggression by an acquaintance. *Violence and Victims*, 9, 315-324.
- Hom, P. W., Carankias-Walker, R., Prussia, B. E., & Griffeth, R. W. (1992). A meta-analytic structural equations analysis of a model of employee turnover. *Journal of Applied Psychology*, 77, 890-909.
- Hom, P. W., & Griffeth, R. W. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. *Journal of Applied Psychology*, 76, 350-366.
- House, J. S. (1981). Work stress and social support. Reading, MA: Addison-Wesley.
- Jackson, J. L., Calhoun, K. S., Amick, A. E., Maddevere, H. M., & Habif, V. L. (1990). Young adult women who report childhood intrafamilial sexual abuse: Subsequent adjustment. *Archives of Sexual Behavior*, 19, 211-221.
- Janoff-Bulman, R. (1979). Characteriological versus behavioral self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology*, 37, 1798-1809.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness, and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73, 287-302.
- Johnson, B. K., & Kenkel, M. B. (1991). Stress, coping, and adjustment in female adolescent incest victims. *Child Abuse & Neglect*, 15, 293-305.
- Johnson, J. D., & Russ, I. (1989). Effects of salience of consciousness-raising information on perceptions of acquaintance versus stranger rape. *Journal of Applied Social Psychology*, 19, 1182-1197.
- Jumper, S. J. (1995). A meta-analysis of the relationship of child sexual abuse to adult psychological adjustment. *Child Abuse & Neglect*, 19, 715-728.
- Kelley, M. L., Hock, E., Jarvis, M. S., Smith, K. M., Gaffney, M. A., & Bonney, J. F. (in press). Psychological Adjustment of Navy Mothers Experiencing Deployment. *Military Psychology*.
- Kelley, M. L., Hock, E., Bonney, J. F., Smith, K. A., Jarvis, M. S., & Gaffney, M. A. (2001). Enlisted Navy Mothers Experiencing and Not Experiencing Deployment: Reasons for Staying or Leaving the Military. *Military Psychology*, 13, 17-20
- Kerce, E. W. (1995). Quality of life in the U.S. Marine Corps (TR-95-4). San Diego: Navy Personnel Research and Development Center.
- Kerce, E. W. (1998). Assessment of USMC quality of life (QOL) program contributions to readiness, performance, and retention: Volume I, design and methodology (TN-98-6). San Diego, CA: Navy Personnel Research and Development Center.
- Kerce, E. W., Sheposh, J., & Knapp, S. (1999). Assessment of USMC quality of life (QOL) program contributions to readiness, performance, and retention: Volume II, pilot test results (TN-99-5). San Diego, CA: Navy Personnel Research and Development Center.

- Kim, S., Price, J. L., Mueller, C. W., & Watson, T. W. (1996). The determinants of career intent among physicians at a U.S. Air Force hospital. *Human Relations*, 49, 947-976.
- Kirkpatrick, D. L., (1994). Evaluating training programs: The four levels. San Francisco: Berrett-Koehler.
- Klerman, L. V. (1993). The relationship between adolescent parenthood and inadequate parenting. *Children and Youth Services Review*, 15, 309-320.
- Koopman, M. E., & Goldhaber, D. D. (1997). Return on quality-of-life investment (CRM 96-147). Alexandria, VA: Center for Naval Analyses.
- Koss, M. P. (1985). The hidden rape victims: Personality, attitudinal, and situational characteristics. *Psychology of Women Quarterly*, *9*, 193-212.
- Koss, M. P. (1998). Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In M. E. Odem & J. Clay-Warner (Eds.), Confronting rape and sexual assault (pp. 51-69). Wilmington, DR: SR Books/Scholarly Resources.
- Koss, M. P., & Gaines, J. A. (1993). The prediction of sexual aggression by alcohol use, athletic participation, and fraternity affiliation. *Journal of Interpersonal Violence*, 8, 94-108.
- Koss, M. P., Gidycz, C. D., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55, 162-170.
- Lance, C. E. (1991). Evaluation of a structural model relating job satisfaction, organizational commitment, and precursors to voluntary turnover. *Multivariate Behavioral Research*, 26, 137-162.
- Landsverk, J., & Lindsay, S. (1995). *New parent support program semi-annual report*. San Diego, CA: Children's Hospital-San Diego.
- LaRocco, J. M., & Jones, A. P. (1978). Co-worker and leader support as moderators of stress-strain relationships in work situations. *Journal of Applied Psychology*, 63, 629-634.
- LaRocco, J. M., & Jones, A. P. (1980). Organizational conditions affecting withdrawal intentions and decisions as moderated by work experiences. *Psychological Reports*, 46, 1223-1231.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with person- and work-related variables. *Journal of Applied Psychology*, 85, 799-811.
- Leitenberg, H., Greenwald, E., & Cato, S. (1992). A retrospective study of long-term methods of coping with having been sexually abused during childhood. *Child Abuse & Neglect*, 16, 399-407.
- Levy, P. S., & Lemeshow, S. (1999). Sampling of populations: Methods and applications. New York: Wiley.
- Lodico, M. A., Gruber, E., & DiClemente, R. J. (1996). Childhood sexual abuse and coercive sex among school-based adolescents in a midwestern state. *Journal of Adolescent Health*, 18, 2110-217.
- Lombard, D. N., & Lombard, T. N. (1997). Commentary: Taking care of our military families. Families, Systems & Health, 15, 79-83.

- Lonsway, K. A., Klaw, E. L., Berg, D. R., Waldo, C. R., Kothari, C., Mazurek, C. J., & Hegeman, K. E. (1998). Beyond "no means no" Outcomes of an intensive program to train peer facilitators for campus acquaintance rape education. *Journal of Interpersonal Violence*, 13, 73-92.
- Martin, L., Rosen, L. N., Durand, D. B., Knudson, K. H., & Stretch, R. H. (2000). Psychological and physical health effects of sexual assaults and nonsexual traumas among male and female United States Army soldiers. *Behavioral Medicine*, 26, 23-33.
- Martin, L., Stretch, R. H. Rosen, L. N., Knudson, K. H., & Durand, D. B. (1998). Prevalence and timing of sexual assaults in a sample of male and female U. S. Army soldiers. *Military Medicine*, 163, 213-216.
- Marx, B. P., Calhoun, K. S., Wilson, A. E., & Meyerson, L. A. (2001). Sexual revictimization prevention: An outcome evaluation. *Journal of Consulting and Clinical Psychology*, 69, 25-32.
- McCarroll, J. E., Newby, J. H., Thayer, L. E., Ursano, R. J., Norwood, A. E., & Fullerton, C. S. (1999). Trends in child maltreatment in the US Army. *Child Abuse & Neglect*, 23, 855-861.
- McKeown, R. E., Jackson, K. L., & Valois, R. F. (1998). The frequency and correlates of violent behaviors in a statewide sample of high school students. *Family & Community Health*, 20, 38-53.
- McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage Publications.
- Merrill, L. L., Hervig, L. K., & Milner, J. S. (1996). Childhood parenting experiences, intimate partner conflict resolution, and adult risk for child physical abuse, *Child Abuse and Neglect*, 20, 1048-1065.
- Merrill, L. L., Hervig, L. K., Newell, C. E., Gold, S. R., Milner, J. S., Rosswork, S. G., Koss, M. P., & Thornton, S. R. (1998). Prevalence of premilitary adult sexual victimization and aggression in a Navy recruit sample. *Military Medicine*, 163, 209-212.
- Merrill, L. L., Newell, C. E., Hervig, L. K., Booth-Kewley, S., Patriarca, L., & Gilman, P. A. (1997). Pre-enlisted maltreatment histories of U.S. Navy basic trainees: Prevalence rates for the 2nd quarter of 1994 and the 4th quarter of 1996. Report No. 97-2, San Diego, CA: Naval Health Research Center.
- Merrill, L. L., Newell, C. E., Thomsen, C. E., Gold, S. R., Milner, J. S., Koss, M. P., & Rosswerk, S. G. (1999). Childhood abuse and sexual revictimization in a female Navy recruit sample. *Journal of Traumatic Stress*, 12, 211-225.
- Merrill, L. L., Thomsen, C. J., Gold, S. R., & Milner, J. S. (2001). Childhood abuse and premilitary sexual assault in male Navy recruits. *Journal of Consulting and Clinical Psychology*, 69, 252-261.
- Mishik, A. N., & Ferry, F. T. (1992). The utilization of medical and nonmedical specialties in the assessment of child abuse in the military community. *Military Medicine*, 157, 291-294.
- Mollerstrom, W. W., Patchner, M. A., & Milner, J. S. (1992). Family violence in the Air Force: A look at offenders and the role of the family advocacy program. *Military Medicine*, 157, 371-374.

- Mollerstrom, W. W., Patchner, M. A., & Milner, J. S. (1995). Child maltreatment: The United States Air Forces' response. *Child Abuse & Neglect*, 19, 325-334.
- Moskos, C. C. (1986). From institution to occupation: Trends in military organization. *Armed Forces and Society*, 4, 41-50.
- Muehlenhard, C. L. & Linton, M. A. (1987). Date rape and sexual aggression in dating situation: Incidence and risk factors. *Journal of Counseling Psychology*, 34, 186-196.
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1994). The effect of child sexual abuse on social, interpersonal, and sexual function in adult life. *British Journal of Psychiatry*, 165, 35-47.
- Myers, S. S. (1979). Child abuse and the military community. Military Medicine, 144, 23-25.
- National Victims Center (1992). Rape in America: A report to the nation. Arlington, VA: National Victims Center.
- National Institute of Justice (2000). Full report of the prevalence, incidence, and consequences of violence against women. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Navy Office of Minority Affairs (2002). Navy demographics 31 Mar 02. Washington, DC: Bureau of Naval Personnel, Office of Minority Affairs.
- Neumann, I., Abrahams, N., & Githens, W. (1972). The values of junior officers. Part II. The relationship between career values and retention (Research Report No. SRR72-35). San Diego, CA: Naval Personnel and Training Research Laboratory.
- Norris, J., & Cubbins, L. A. (1992). Dating, drinking and rape. Effects of victim's and assailant's alcohol consumption on judgments of their behavior and traits. *Psychology of Women Quarterly*, 16, 179-191.
- Nurius, P. S., & Norris, J. (1996). Through her eyes: Factors affecting women's perception of and resistance to acquaintance sexual aggression threat. *Psychology of Women Quarterly*, 20, 123-145.
- O'Leary, D. K. (1987). Assessment of marital discord: An integration for research and clinical practice. Hillsdale, NJ: Erlbaum.
- Olmsted, M. & Underhill, C. (In Press). 2000 Navy-wide Personnel Survey (NPS): Report of Survey Findings. Millington, TN: Navy Personnel Research, Studies, and Technology.
- Olson, C. B., & Merrill, L. L. (2000). Self-reported perpetration of sexual harassment by U.S. Navy men in their first year of duty. Report No. 00-23. San Diego, CA: Naval Health Research Center.
- Orthner, D. K. (1990). Family impacts on the retention of military personnel (Research Report 1556). Alexandria, VA: U.S. Army Research Institute for the Behavioral Sciences.
- Orthner, D. K., & Pittman, J. F. (1986). Family contributions to work commitment. *Journal of Marriage and the Family*, 48, 573-581.
- Peterson, S. A., & Franzese, B. (1987). Correlates of college men's sexual abuse of women. Journal of College Student Personnel. 28, 223-228.

- Pittman, J. F., & Orthner, D. K. (1988). Predictors of spousal support for the work commitments of husbands. *Journal of Marriage and the Family*, 50, 335-348.
- Pope, J. A. (2000). Revictimization among female survivors of childhood sexual abuse: Risk and protective factors. Unpublished dissertation.
- Prier, R. E., & Gulley, M. I. (1987). A comparison of rates of child abuse in U.S. Army families stationed in Europe and in the United States. *Military Medicine*, 152, 437-440.
- Raczek, S. W. (1992). Childhood abuse and personality disorders. *Journal of Personality Disorders*, 6, 109-116.
- Raiha, N. K., & Soma, D. J. (1997). Victims of child abuse and neglect in the U.S. Army. *Child Abuse & Neglect*, 21, 759-768.
- Raja, S. (2001). Secondary victimization among female veterans who have experienced sexual assault. Unpublished dissertation.
- Redmond, C., Spoth, R. Shin, C., & Lepper, H. S. (1999). Modeling long-term parent outcomes of two universal family-focused preventive interventions: One-year follow-up results. *Journal of Consulting & Clinical Psychology*, 67, 975-984.
- Reilly, M. E. (1994). Modeling military reenlistment: The moderating effects of enlistment motivations. Unpublished doctoral dissertation, George Mason University, Fairfax, Virginia.
- Riggs, D., & O'Leary, D. K. (1996). Aggression between heterosexual dating partners: An examination of a causal model of courtship aggression. *Journal of Interpersonal Violence*, 11, 519-540.
- Roche, L. (1993). Military in crisis: Sexual harassment and rape in the armed forces, NCASA Journal, 1, 1-2.
- Romano, E., & DeLuca, R. V. (2001). Male sexual abuse: A review of effects, abuse characteristics, and links with later psychological functioning. *Aggression & Violent Behavior*, 6, 55-78.
- Rosen, L. N., & Durand, D. B. (1995). The family factor and retention among married soldiers deployed in Operation Desert Storm. *Military Psychology*, 4, 221-234.
- Rosen, L. N., & Martin, L. (1996a). Childhood antecedents of psychological adaptation to military life. *Military Medicine*, 161, 665-668a.
- Rosen, L. N., & Martin, L. (1996b). The measurement of childhood trauma among male and female soldiers in the U.S. Army. 20, Neglect, 342-345.
- Rosenberg, F. R. (1994). Mental health among Army spouses: A study of the relationship between institutional factors and well being. *International Sociological Association*.
- Rumm, P. D., Cummings, P., Krauss, M. R., Bell, M. A., & Rivara, R. P. (2000). Identified spouse abuse as a risk factors for child abuse. *Child Abuse & Neglect*, 24, 1375-1381.
- Sadler, A. (1996). Sexual victimization and the military e4nvironment: Contributing factors, vocational, psychological and medical sequelae. DAMD17-95-1-5073. Veterans Administration Medical Center, Iowa City, IA 52246.

- Sadler, A., Booth, B. M., Nielson, D., & Doebbeling, B. N. (2000). Health-related consequences of physical and sexual violence: Women in the military. *Obstetrics & Gynecology*, 96, 473-480.
- Sanders, J. R. (1992). Evaluating School programs: An educator's guide. Newbury Park, CA: Corwin Press.
- Schumm, W. R., & Bell, D. B. (2000). Soldiers at risk for individual readiness or morale problems during a six-month peacekeeping deployment to the Sinai. *Psychological Reports*, 87, 623-633.
- Schumm, W. R., Bell, D. B., & Resnick, G. (2001). Recent research on family factors and readiness: Implications for military leaders. *Psychological Reports*, 89, 153-165.
- Schwerin, M.J., Michael, P.G., Glaser, D.N., & Farrar, K.L. (2002). A cluster evaluation of Navy quality of life programs. *Evaluation and Program Planning*, 25 (3), 303-312.
- Schwerin, M.J., Michael, P.G., Glaser, D.N., & Uriell, Z.A. (2002). Navy quality of life (QOL) program contributions to readiness and career intentions. Volume II: Pilot test results. (NPRST-TN-03-7) Navy Personnel Research, Studies, & Technology (PERS-1). Millington, TN.
- Segal, M. W., & Harris, J. J. (1993). What we know about Army families (Special Report No. 21). Alexandria, VA: U.S. Army Research Institute for the Behavioral Sciences.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, 78, 774-780.
- Sinclair, B. B., Merrill, L. L., Thomsen, C. J., & Gold, S. R. (2001). Predicting the impact of child sexual abuse in women: A model of severity, support, attachment, and coping. NHRC Report 99-25. San Diego, CA: Naval Health Research Center.
- Smikle, C. B., Fiedler, E., Sorem, K. A., & Spencer, D. K. (1996). The impact of sexual abuse on job attrition in military recruits. *Military Medicine*, 161, 146-148.
- Springs, F. E., & Friedrich, W. N. (1992). Health risk behaviors and medical sequelae of childhood sexual abuse. *Mayo Clinical Procedures*, 67, 527-532.
- Soma, D. J. (1987). An analysis of child maltreatment in the United States Army: 1983-1985. Unpublished doctoral dissertation, University of Washington, Seattle, Washington.
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22, 46-56.
- Stein, J., Golding, J., Siegel, J., Burnam, M. A., & Sorenson, S. (1988). Long-term psychological sequelae of child sexual abuse. In G. E. Wyatt & G. J. Powell (Eds.), *Lasting effects of child sexual abuse (pp. 135-154)*. Newbury Park, CA: Sage Publications.
- Surgeon General of the Air Force. (1996). Family Advocacy Program quarterly report. Washington, DC: Author.
- Tamis-LeMonda, C. S., Bornstein, M. H., Baumwell, L., & Damast, A. M. (1996). Responsive parenting in the second year: Specific influences on children's language and play. *Early Development & Parenting*, 5, 173-183.

- Tedeschi, J. T., & Felson, T. B. (1994). Violence, aggression, & coercive actions. Washington, DC: American Psychological Association.
- Teplitzky, M. L. (1991). Junior Army officers retention intentions: A path analytic model (Technical Report No. 934). Alexandria, Virginia: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Testa, M., & Collins, R. L. (1997). Alcohol and risky sexual behavior: Event-based analyses among a sample of high-risk women. *Psychology of Addictive Behaviors*, 11, 190-201.
- Testa, M., & Livingston, J. A. (1999). Alcohol and sexual aggression: Reciprocal relationships over time in a sample of high-risk women. *Journal of Interpersonal Violence*, 15, 413-427.
- Testa, M., & Livingston, J. A. (2000). Qualitative analysis of women's perceived vulnerability to sexual aggression in a hypothetical dating context. *Journal of Social & Personal Relationships*, 17, 729-741.
- Testa, M., & Parks, K. A. (1996). The role of women's alcohol consumption in sexual victimization. Aggression and Violent Behavior: A Review Journal, 1, 217-234.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.
- Thompson, R. W., Ruma, P. R., Brewster, A. L., Besetsney, L. K., & Burke, R. V. (1997). Evaluation of an Air Force child physical abuse prevention project using the reliable change index. *Journal of Child and Family Studies*, 6, 421-343.
- Trice, H. (1993). Occupational subcultures in the workplace. New York: ILR Press.
- Trickett, P. K., & Putnam, F. W. (1993). Impact of child sexual abuse on females: Toward a developmental psychobiological integration. *Psychological Science*, 4, 81-87.
- Ullman, S. E., Karabatsos, G., & Koss, M. P. (1999). Alcohol and sexual assault in a national sample of college women. *Journal of Interpersonal Violence*, 14, 603-625.
- U.S. Bureau of the Census. (2002). Statistical Abstracts of the United States. Available: http://www.census.gov/prod/2002pubs/01statab/pop.pdf.
- U.S. Department of Health and Human Services (1999). Health in the United States 1998-1999 and injury chartbook. Washington, DC: U.S. Bureau of the Census.
- Walch, A. G., & Broadhead, W. E. (1992). Prevalence of lifetime sexual victimization among female patients. *Journal of Family Practice*, 35, 511-516.
- Warshaw, R. (1988). I never called it rape: The Ms. Report on recognizing, fighting, and surviving date and acquaintance rape. New York: Harper & Row.
- Watkins, B., & Bentovim, A. (1992). Male children and adolescents as victims: A review of current knowledge. In G. C. Mezey & M. B. King (Eds.), Male victims of sexual assault. Oxford medical publications (pp. 27-66). New York, NY: Oxford University Press.
- White, M. A., Baker, H. G., & Wolosin, D. G. (1999). Quality of life (QOL) in the Marine Corps: A comparison between 1993 and 1998 (TR-99-1). San Diego, CA: Navy Personnel Research and Development Center.

- White, J. W., & Humphrey, J. A. (1995). Victimization status and perceived risk of sexual assault: Longitudinal analyses. Paper presented at the annual meeting of the American Psychological Association, New York.
- White, J. W., & Koss, M. P. (1991). Courtship violence: Incidence in a national sample of higher education students, *Violence & Victims*, 6, 247-256.
- Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. *Psychological Bulletin*, 106, 3-28.
- Wiese, D., & Daro, D. (1995). Current trends in child abuse reporting and fatalities: The results of the 1994 annual fifty state survey. Chicago: National Committee to Prevent Child Abuse.
- Wilcove, G. L., Schwerin, M. J., & Wolosin, D. G. (2002, in press). An exploratory model of quality of life in the U.S. Navy. *Military Psychology*.
- Wolfe, J., Young, B., & Brown, P. (1992). Self-reported sexual assault in female Gulf War veterans. Specific paper presented at the annual meeting of the Advancement of Behavior Therapy.
- W. K. Kellogg Foundation (1998). W. K. Kellogg Foundation evaluation handbook. Battle Creek, MI: Author.
- Woodworth, S., Belsky, J., & Crnic, K. (1996). The determinants of fathering during the child's second and third years of life: A developmental analysis. *Journal of Marriage and the Family*, 58, 679-692.
- Wyatt, G. E., Guthrie, D., & Notgrass, C. M. (1992). Differential effects of women's child sexual abuse and subsequent sexual revictimization. *Journal of Consulting and Clinical Psychology*, 60, 167-173.
- Zierler, S., Feingold, L., Laufer, D., Velentgas, P., P., Kantrowitz-Gordon, I., & Mayer, K. (1991). Adult survivors of childhood sexual abuse and subsequent risk of HIV infection. American Journal of Public Health, 81, 572-575.
- Zirk, D. A., McTeigue, R. J., Wilson, M., Adelman, L., & Pliske, R. (1987). Alternative approaches to modeling the individual enlistment decision: A literature review (ARI Technical Report No. 738). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A184 498).

Appendix A Child Maltreatment Literature Review

Incidence of Child Maltreatment in Military Families

Military service places extraordinary demands on active duty personnel and their families. It should be noted that both individual characteristics (e.g., Kelley et al., 2001) and family factors influence worker effectiveness, job commitment, and retention (e.g., see Edwards & Rothbard, 2000 for a review; Etheridge, 1989; Griffeth, Hom, & Gaertner, 2000; Lee, Carswell, & Allen, 2000; Orthner & Pittman, 1986). As our understanding of the inter-relatedness of work and family has increased, both private and public organizations have begun providing an increasing array of services to employees and their families.

One of the ways that the military is able to support families is by providing the NPSP. NPSP is a program for expectant and new parents who might benefit from additional parenting education and support during the first three years of a child's life. Information and classes on child development, positive parenting skills, parent/infant groups, sibling groups, and a lending program are among the various services offered. Home visits aimed at intervention are also available for families that present risk or have documented family violence or child maltreatment.

The issue of providing education and support services to parents is critical, given that family violence and child maltreatment are common in today's society. Nationally, more than 3 million children are officially reported as abused or neglected each year (U.S. Department of Health and Human Services, 1999). Considerable research has documented factors that are associated with child abuse. High levels of stress and little social support have been associated with child abuse (DePanfilis & Zuravin, 1999). Little research has examined the issue of geographic mobility and child maltreatment; however, frequent moving has been associated with inadequate parenting in low-income families (Klerman, 1993).

Military families are not immune to the problems of child abuse and neglect. In 1991, the Department of Defense (DoD) required that all military branches collect data on child abuse reports. Although information on child maltreatment among military dependents has increased, some documentation was available prior to 1991. Of child maltreatment reports at Naval medical facilities that treated dependent children, 67 percent of the cases were for physical abuse, 22 percent were neglect, and 6 percent were for sexual abuse (Acord, 1977). Myers (1979) reported Air Force statistics on child abuse and neglect from 1975 to 1977. Physical abuse cases were 61 to 66 percent of the total cases, whereas sexual abuse and neglect cases were 14 to 19 percent. Dubanoski and McIntosh (1984) examined data on all military families in Hawaii. They found that 46 percent of cases were for physical abuse, 7 percent were for sexual abuse, less than 1 percent were for emotional abuse, and 46 percent were for neglect.

There is the perception that the incidence of child abuse and neglect is higher in military families than civilian families. Most investigations comparing the incidence of child maltreatment in military families to non-military families have found lower incidence of child maltreatment in military families (see Prier & Gulley, 1987; Thompson et al., 1997). For instance, Wiese and Daro (1995) reported 16 cases per 1,000 children in the United States in 1994, whereas during the same year there were 7.5 cases per 1,000 children in Air Force families (Surgeon General of the Air Force, 1996). However, a sample of Navy personnel attending an outpatient mental health clinic reported comparable incidence of childhood sexual and physical abuse as those reported among civilians attending an outpatient mental health clinic (Dansak,

1998). Data collected on U.S. Army families found higher rates of child abuse for families stationed in Western Europe than for those located in the continental United States (Prier & Gulley, 1987). Prier and Gulley speculated that the social and cultural isolation associated with living in a foreign country increases stress that in turn may increase the likelihood of child abuse.

More recently, reports were obtained from the U.S. Army Central Registry (ACR) during the period 1975-1997 (McCarroll et al., 1999). Although the rates for minor physical abuse and neglect showed decreases over the past decade, major physical abuse remained virtually unchanged, and sexual and emotional abuse showed small fluctuations. Mollerstrom, Patchner, and Milner (1995) presented descriptive data on over 19,587 substantiated cases of child abuse and neglect that occurred in the U.S. Air Force (USAF) over a 6-year period. They noted substantial rates of child abuse and neglect, as well as annual percentage increases in child maltreatment reports. In part, the increase was attributed to more accurate reporting of child abuse and neglect. Higher rates of abuse were found among lower paygrades with lower income. Also, among Army families, younger parental age and spouse abuse is associated with substantiated reports of child physical abuse (Rumm, Cummings, Krauss, Bell, & Rivara, 2000).

Raiha and Soma (1997) examined child maltreatment victims in the United States Army during 1992 and 1993. Data on all substantiated child maltreatment cases in the Army Family Advocacy Central Registry were obtained from the Army Medical Department's Patient Administration System and Biostatistics Activity. Specifically, data were analyzed on 8,422 substantiated child maltreatment cases reported to the Army Family Advocacy Registry. In both years, 38 percent of all cases involved minor physical abuse, 39 percent involved child neglect, 17 percent involved sexual maltreatment, and less than 4 percent involved major physical abuse. The percentage of cases involving emotional abuse increased from 8.9 percent to 10.2 percent. Importantly, 7.1 percent of cases involved more than one type of abuse. Younger children and children of sponsors with lower paygrades were at greater risk for physical abuse and neglect. For instance, 47 percent of the victims of major physical abuse were under 1 year of age, and children less than 1 year of age were 16 times more likely to be seriously abused than older children. In fact, children of privates (E-1-E-3) and specialists (E-4) were six times more likely than children of sponsors with higher paygrades to be victims of major abuse. Specifically, of the 297 child victims of major physical abuse, 127 were under the age of 1 year with a private or specialist sponsor. This rate was more than 27 times the rate for all other children. Similarly, children of parents with lower paygrades (E-1-E-5) were more likely to experience minor physical abuse than were children of parents with higher paygrades (E-6-E-9). These findings parallel results from Soma's (1987) analysis of Army child abuse and neglect that found younger children generally are at greater risk for physical abuse and neglect than are older children.

In contrast to their findings on major physical abuse, Raiha and Soma (1997) reported that minor physical abuse, emotional abuse, and sexual abuse peaked in the teenage years. Females between the ages of 12 and 15 were at particular risk for experiencing sexual abuse. Children with lower grade sponsors were more likely to experience sexual abuse. Lower rank is associated with economic hardship, less knowledge of child development, psychological immaturity, lower educational levels, lower parental age and disadvantaged backgrounds (see Raiha & Soma, 1997 for a discussion). Many of these parent characteristics have been associated with risk for child abuse and poor developmental outcomes for children in civilian studies (e.g., Fox, Platz, & Bentley, 1995). It is important to note that the rates of child abuse and neglect among children in military families were lower than for the general U.S. population, however. In part, this

difference was attributed to lower neglect rates for children in Army families. These lower rates were attributed to the lack of chronic unemployment, infrequent mental illness, and lower rates of substance abuse, all of which may contribute to the higher rates of child risk among civilians.

Among Air Force families, Brewster, Nelson, and Hymel (1998) found 32 cases of substantiated infanticide due to family maltreatment occurring from 1989 to 1995. The typical infant victim was approximately 5 months of age, had been physically abused previously, exhibited colic-like behavior, and was slightly smaller than average for his or her age. The typical caretaker-perpetrator was the child's biological father who had a personal history of child abuse. The typical family had 1 or 2 children with 2 young married adults and had experienced some life stressors at the time of the incident.

Merrill et al. (1996) examined factors associated with child abuse risk potential. Personal experience with parent-child violence accounted for the most variance in explaining child abuse risk potential in females and males. Intimate partner violence inflicted by the respondent added to child abuse risk for girls. Moreover, after the effects of violence experienced were removed, a personal history of alcohol problems contributed significantly to the prediction of risk of child abuse. Mollerstrom et al. (1992) found a significant relationship between the presence of family conflict, lack of family cohesion, poor marital satisfaction, and potential for abuse. Clearly, these findings suggest that family and background characteristics are associated with the potential for child abuse. Importantly, focusing on child maltreatment without acknowledging the more general problem of family violence and other factors associated with risk for child abuse may be an oversimplified and shortsighted solution.

Far fewer investigations have examined the degree to which child abuse is related to military outcomes. There is some evidence that childhood abuse is related to a failure to complete basic training (Crawford & Fiedler, 1992) and susceptibility to post-traumatic stress disorder, or PTSD (Bremner, Southwick, Johnson, Yehuda, & Charney, 1993; Donovan, Pandlin-Riveras, Dowd, & Blake, 1996; Engel et al., 1993). Rosen and Martin (1996a) found that childhood physical-emotional abuse was the strongest predictor of psychological symptoms among active-duty Army personnel. These same researchers also demonstrated that experiencing emotional abuse as a child predicted lower perceptions of unit cohesion and lower confidence in leaders among military personnel, even after controlling for concurrent psychological symptoms and sociodemographic variables (Rosen & Martin, 1996a). Mishik and Ferry (1992) argue that child advocacy affects military readiness because child abuse and neglect, when not prevented, can affect manpower losses. Moreover, they argue that further losses include the heavy use and involvement of base medical, legal, police, and supportive agencies, and that prevention and early treatment reduce these costs.

Appendix B Sexual Victimization Literature Review

Prevalence of Sexual Victimization for Females

When individuals enter basic training they may have had any number of negative experiences during childhood or adolescence that may have negative repercussions for their psychological health and military careers. One of the most widespread public health problems and criminal justice concerns in the United States is sexual victimization. Sexual victimization is typically defined as any form of sexually aggressive behavior, including, but not limited to, the crime of rape (Breitenbecher, 2000). The scope of sexual victimization, both during childhood and adulthood, has been highlighted in numerous studies. A survey by the National Institute of Justice (2000) found that 17.6 percent of all women surveyed said they had been victims of a completed or attempted rape at some point in their lives. Of the women who had been raped, 21.6 percent were younger than age 12 when they were first raped, and 32.4 percent were ages 12 to 17. Thirty-three percent of the women surveyed by Giles (1997) had been raped at some point in their lives. Similarly, in a routine health visit in a family practice, 47.6 percent of women reported some type of contact sexual victimization during their lives; 25.2 percent of these same women reported rape or attempted rape at some point. Of the 248 student health service patients, 57 percent had experienced contact sexual victimization, and 28.7 percent reported rape or attempted rape (Walch & Broadhead, 1992). In their landmark survey in which a nationally representative sample of college students was surveyed, 54 percent of women reported having experienced some form of sexual aggression since the age of 14. Of those women who were victimized, 12.1 percent reported attempted rape and 15.8 percent had experienced rape (Koss, Gidycz, & Wisniewski, 1987). Surveys of high school students reported that 26 percent (Davis, Peck, & Storment, 1993) and 17 percent (McKeown, Jackson, & Valois, 1998) had experienced unwanted sexual intercourse. In addition, prospective studies found that within a 3- to 4-month period, 18 percent (Gidycz, Coble, Latham, & Layman, 1993) and 27 percent (Greene & Navarro, 1998) of college women experienced sexual victimization.

Importantly, many women do not consider sexual aggression by someone they know as rape. Also, it is difficult to obtain a true estimate of the numbers of victims of sexual assault because many victims do not seek therapy or report the assault to the police. Thus, officially reported crime statistics as well as national victimization surveys significantly underestimate the incidence of rape and sexual assault. More specifically, while approximately 872,000 forcible rapes take place per year (National Institute of Justice, 2000), as few as one in ten rapes are reported to authorities (Koss, 1985). Also, while an estimated 60 to 80 percent of rape is date or acquaintance rape (Koss, 1988), nearly one-half of all date rape victims refuse to discuss the attack with anyone (Warshaw, 1988). Individuals who experience non-stranger assaults may not even identify themselves as victims of sexual violence (Koss et al., 1987).

Sexual Victimization among Female Trainees, Active-duty, and Veterans

Merrill and colleagues have conducted a series of studies that represent the most comprehensive research on premilitary experiences of sexual assault (see Gold & Merrill, 1998; Merrill et al., 1996, 1997, 1999; Merrill, Thomsen, Gold, & Milner, 2001; Sinclair, Merrill, Thomsen, & Gold, 2001). Specifically, 45.5 percent (n = 834) of female Navy recruits had been the victim of an attempted rape; 9.4 percent, (n = 173) and 36.1 percent (n = 661) had been the victim of a completed rape since age 14. Similarly, additional research by this same group indicated that 26.0 percent and 35.0 percent of female Navy trainees had experienced rape and

7.6 percent and 8.0 percent reported attempted rape only (see Merrill et al., 1997, 1999). A subsequent study by this same group of researchers found that 26 percent of female Navy recruits had experienced unwanted sexual contact before age 15 with someone at least five years older (Sinclair et al., 2001). Briere (1998) reported that 53.1 percent of female trainees reported a history of intrafamilial or extrafamilial experiences that met the criteria for sexual abuse. The slightly higher rates reported by Briere reflect that the cut-off for sexual abuse was age 17, whereas a number of other studies have used an age cut-off of 14 or 15. Briere also reported that 18 percent of women who reported rape said that it had occurred more than once, and 4.6 percent of the sample reported an experience of gang rape. Among U.S. Air Force recruits entering basic military training (BMT), 1.5 percent of men reported a history of sexual abuse, whereas 15.1 percent of women reported a history of sexual abuse (Smikle, Fiedler, Sorem, & Spencer, 1996).

The rates for attempted rape among the 1994 and 1996 female Navy recruits surveyed by Merrill and colleagues (1998) were similar to that reported in a nationally representative study of college students (Koss et al., 1987). However, the incidence of rape (36.1% and 26.0%, respectively) was substantially higher than that reported by Koss and colleagues (15.4%). In fact, Merrill and colleagues (1998) noted that no other study has reported a higher rate for completed rape than the 36.1 percent found in the study of female Navy trainees.

Sexual victimization is also surprisingly common among women in other branches of military service. In a survey of female Army trainees, 16.1 percent reported having been raped prior to their entry into the service (Martin, Stretch, Rosen, Knudson, & Durand, 1998). A survey of 288 female veterans found that 15 percent reported attempted or completed rape (Sadler, 1996). Among female Desert Storm veterans, 8 percent had experienced an attempted or completed rape (Wolfe, Young, & Brown, 1992). In a sample of 573 U.S. Army women in combat service and combat service support units, 50.9 percent of women reported some type of sexual assault, and 22.6 percent of women had experienced a completed rape (Martin et al., 1998). Fontana and Rosenheck (1998) found that 43 percent of female Army veterans had experienced rape or attempted rape. Similarly, among 298 women who completed a self-report survey while waiting for a scheduled appointment in an outpatient VA health clinic, 37 percent reported a history of sexual assault (Raja, 2001). In an anonymous survey of 838 female veterans seeking care at a large VA center (with a mean age of 42.4), 55 percent of women reported sexual abuse, with 41 percent of the women who had been abused having been raped (Coyle, Wolan, & Van Horn, 1996). Among women who served in Vietnam and subsequent eras of military services, 48 percent had experienced violence during military service, including rape (30%), physical assault (35%), or both (16%) (Sadler, Booth, Nielson, & Doebbeling, 2000). A Pentagon survey of 20,000 active Army personnel conducted in 1990 found the prevalence of rape was 129 per 100,000. This compares to 81 rape cases per 100,000 civilians (Roche, 1993).

Rosen and Martin (1996b) found that female soldiers on active duty in the U.S. Army were three times more likely to have a history of sexual abuse than males. These same females were three times more likely to have been both physically and sexually abused than males during childhood. Experiences of sexual abuse may have important implications for psychological adjustment and military performance. For instance, higher incidence of sexual abuse may be reflected in the fact that military women typically report more psychological symptomology than their male counterparts (see Kelley et al., in press). Related to this is that PTSD is more common for veterans with a history of childhood abuse (Bremner et al., 1993; Engel et al., 1993). Rosen

and Martin (1996b) contend that their greater likelihood of childhood sexual abuse may increase their likelihood of developing PTSD symptoms upon exposure to combat.

Martin et al. (1998) argue that a history of sexual assault may be more common in military women than in civilian women due to sociodemographic variables that may increase vulnerability to sexual assault both before and after women enter military service. However, parental income, level of education, and region where the individual was from did not differ between female Navy trainees who had and had not experienced sexual assault. Rosen and Martin (1996b) contend that women who join the military may come from more disadvantaged backgrounds than their civilian counterparts. The high rates of premilitary sexual victimization, as well as high incidence of sexual assault while a Service member, suggest the need for additional research to identify why military women appear at greater risk of sexual victimization relative to their civilian counterparts.

Sexual Victimization among Civilian and Military Men

In recent years, there has been growing recognition of the frequency of male sexual victimization. In a review of studies, Fry (1993) reported that between 3 percent and 31 percent of men have experienced childhood sexual abuse. Bagley and Thurston (1996) estimated that 10 percent to 15 percent of males experience at least one incident of sexual abuse prior to 16 years of age. A recent national study found that 3 percent of surveyed men reported experiencing a completed or attempted rape at some time in their lives (National Institute of Justice, 2000). In their sample of 555 U.S. Army soldiers, Martin and colleagues (1998) reported that 6.7 percent of males had experienced some form of sexual assault, and that 1 percent of men had been raped. Most assaults had taken place prior to entering the military. Males are especially reluctant to report having been the victim of sexual abuse (Brannon, Larson, & Doggett, 1989). Romano and DeLuca (2001) contend there are many reasons males may not report sexual victimization, including reluctance on the part of professionals to acknowledge abuse, hesitation on the part of men to seek treatment, and the stigma of homosexuality associated with male sexual abuse. In addition, many abused males may blame themselves, not for initiating the sexual activity, but for not being able to defend themselves against the offender. Importantly, female children are more frequently abused by family members (e.g., Gold, Elhai, Lucenko, Swingle, & Hughes, 1998), whereas males are more likely to experience victimization outside the home. Although boys are more likely to experience abuse by a non-family member than are girls, Faller (1989) found 63 percent of male victims were abused by family members as compared to 89 percent of female victims.

Perpetration of Sexual Aggression

Men are overwhelmingly the perpetrators of sexually aggressive behaviors (Hall, Hirschman, Graham, & Zaragoza, 1993). In a nationally representative study of over 2,900 college men, 3.2 percent reported attempting to rape and 4.6 percent reported raping at least one woman (Koss et al., 1987). A survey of 294 male college students at a large southwestern university found that 7.1 percent of respondents had engaged in a behavior defined as rape (Muehlenhard & Linton, 1987). Importantly, in a nationally representative sample, White and Koss (1991) reported that 81 percent of the men had inflicted, as well as received, some form of verbal aggression at least once, whereas the comparable figure for women was nearly 90 percent.

Among 1,891 male Navy trainees who were surveyed by Merrill and colleagues (1998), 14.8 percent (n = 260) had attempted rape (3.5%, n = 62) or completed rape (11.3%, n = 198). Olson and Merrill (2000) reported that 8 percent of male Navy recruits reported rape more than once, and 2.3 percent had been involved in gang rape. In three large samples of male Navy recruits, Merrill and colleagues (1999) found that the percentage of men who had attempted rape (3.5%) was equivalent to that reported for college men (Koss et al., 1987). In the same study, however, the percentage of male Navy recruits who had completed rape was more than twice that reported in the Koss et al. (1987) study of college men. More recently, in three samples of male U.S. Navy recruits (N = 7,850) Merrill and colleagues (2001) reported that 11.3 percent, 11.6 percent, and 9.9 percent of men had raped a woman prior to entering military service. When demographic factors were controlled for, both childhood physical abuse and childhood sexual abuse were independently and additively predictive of rape in each of the samples, with men who had experienced both forms of abuse showing the highest risk of committing rape. In both 1994 and 1996 samples of male Navy trainees, about 1 in 3 of the respondents admitted to engaging in unwanted sexual contact, rape, or attempted rape. This compares to about 1 in 4 of the male college students in the Koss et al. (1987) study who reported engaging in the same behaviors. Also important to consider is that many men may not define forced intercourse as sexual assault due to perceived mitigating factors or to the behavior of the victim (Briere, 1998).

Factors Related to Sexual Victimization

A number of studies have attempted to identify factors that may increase women's risk of sexual victimization. Considerable research has demonstrated that young women, particularly women between the ages of 16 and 24, are especially vulnerable to sexual victimization (Bureau of Justice Statistics, 1994). In fact, more than 80 percent of the women who experience rape do so by age 24 (National Victims Center, 1992). Thus, by virtue of their age, military women may be at considerable risk for experiencing sexual victimization. In addition, enlisted women and unmarried military women were more likely to report abusive experiences than female officers and married military women, respectively (Coyle et al., 1996). Also, recent veterans are more likely to report sexual victimization than female veterans who served during or prior to the Vietnam war (Sadler, 1996).

Research on the nature of sexual activity and psychological distress clearly indicates that abuse involving more invasive acts is associated with greater negative impact (e.g., Browne & Finkelhor, 1986). Also, women with a history of childhood sexual assault are at least two times more likely than non-abused women to experience revictimization (see Merrill et al., 1999 for a discussion; National Institute of Justice, 2000). Specifically, Pope (2000) found that 46 percent of women who experienced childhood sexual assault were raped as adults. Among Navy recruits, childhood physical or sexual abuse independently and additively predicted rape (Merrill et al., 1999, 2001). Specifically, Merrill et al. (1999) found that controlling for childhood physical abuse, rape was 4.8 times more likely for women who had experienced childhood sexual abuse. It is important to note that female Navy recruits report strikingly high rates of childhood sexual abuse. Merrill et al. (1999) found that 39.2 percent of female recruits had experienced some type of childhood sexual abuse. Gold and Merrill (1998) reported that the odds of a later rape were over six times greater for female Navy recruits who had experienced both physical and sexual abuse as children compared to women with no history of abuse. In fact, Fontana and Rosenheck (1998) argued that sexual victimization is an enduring theme in the lives of some women.

While childhood sexual violence is a factor in later revictimization of military women, over time other factors associated with the military job may become increasingly important. For instance, Sadler (1996) found that controlling for era of service and military environmental factors accounted for a greater proportion of the variability in reported rape during military service than did premilitary rape or childhood sexual abuse. Moreover, the combination of era of service, sexual harassment on duty, ranking service member demand for sex rol, e stereotypical extra-duty jobs, unwanted sexual advancements in sleeping quarters, and greater duty ratio of male soldiers accounted for 27 percent of the variance associated with rape in the military. Importantly, 67 percent of the women who had been raped, had been raped on base (Sadler, 1996). Clearly, this challenges the widespread belief that military bases are safe for women.

A growing body of research has demonstrated that alcohol use is associated with women's experiences of sexual victimization (Abbey, Ross, McDuffie, & McAuslan, 1996; Gold & Merrill, 1998; Koss & Gaines, 1993; see Testa & Parks, 1996 for a review; Ullman, Karabatsos, & Koss, 1999). For instance, Muehlenhard and Linton (1987) found that heavy alcohol use both by the man and woman was associated with dates involving sexual aggression as compared to dates that did not involve heavy alcohol use. Testa and Livingston (1999) found that alcohol and drug use were associated with a large percentage of women's experiences of sexual assault. These same researchers found that alcohol or drug use by the perpetrator was associated with more severe forms of sexual assault. In a longitudinal study of 93 women, after controlling for women's initial experiences of sexual aggression, alcohol consumption predicted women's experiences of subsequent sexual victimization (Testa & Livingston, 2000).

In two separate samples of female Navy trainees, Merrill et al. (1997) linked alcohol and drug use to sexual victimization. Specifically, among women who entered the Navy in 1994 and who reported being the victim of sexual assault, 17.9 percent of their experiences involved the use of alcohol or drugs; and 16.5 percent involved the threat of or use of force and the use of alcohol or drugs. Among women who entered the Navy in 1996 and who reported being the victim of sexual assault, 23.4 percent of their experiences exclusively involved the use of alcohol or drugs; 26.6 percent involved the threat or use of force and the use of alcohol and drugs (Merrill et al., 1997). Gold and Merrill (1998) found that alcohol problems, childhood abuse, number of sexual partners, and more feminine behavior on the part of women contributed to the prediction of rape victimization. Importantly, data drawn from the 1995 DoD Survey of Health Related Behaviors Among Military Personnel indicated substantial substance abuse among military men and women (Bray, Fairbank, & Marsden, 1999). In fact, a recent survey found that 25 percent of Navy men in their first year of active duty service were classified as possibly alcoholic or alcoholic as determined by a widely used self-report measure of problem drinking (Olson & Merrill, 2000). Among these same men, self-reported binge drinking was associated with sexual coercion.

There are many explanations for why alcohol use may be related to experiences of sexual assault. Often, it is difficult to disentangle the effects of alcohol use by the woman from the setting or from the male perpetrator's use of alcohol. However, alcohol use may place women in situations (e.g., parties, bars) where they are near men whose aggression has been primed by alcohol (see Testa & Parks, 1996). Some researchers have argued that alcohol may serve as a disinhibitor for aggressive behavior (e.g., Testa & Collins, 1997). Also, alcohol may increase anger and arousal in men (e.g., Tedeschi & Felson, 1994; Testa & Collins, 1997). Moreover, some men believe that women who are intoxicated present themselves as more sexually available

than are sober women (George, Gournic, & McAfee, 1988), and some men are less likely to view sex forced with an intoxicated woman as rape (Norris & Cubbins, 1992). Harrington and Leitenberg (1994) found that intoxicated women were more likely to have participated in consensual sexual activity with the aggressor immediately prior to the incident of sexual assault. Also, alcohol use appears to be related to women's ability to notice danger and resist unwanted sexual advances (Nurius & Norris, 1996). Alcohol use has been associated with the number of sexual partners among Army recruits (Eitzen & Sawyer, 1997), which may increase the likelihood that a woman comes into contact with a sexually aggressive man. While alcohol use may contribute to sexual aggression, Testa and Livingston (1999) note that while decreasing alcohol consumption may reduce sexual aggression, alcohol use is not sufficient for causing sexual assault.

Factors Related to Men's Sexual Aggression

In contrast to research examining victim characteristics, far fewer investigations have examined factors associated with men's sexual aggression. Men's beliefs have been correlated with sexual aggression. Specifically, Peterson and Franzese (1987) found a positive relationship between the tendency to perform sexual assault and the acceptance of rape myths, the downplaying of sexual assault as a problem, and traditional views of women's roles in American society. It is possible that the more a man's sex-role attitudes include the notion that aggression toward women is acceptable, the more likely he would be to commit sexual aggression toward women (see Olson & Merrill, 2000).

Although not all studies demonstrate a relationship between childhood sexual abuse and later sexual victimization (e.g., see Fischer, 1992), in general, studies demonstrate that early unwanted sexual contact is associated with later sexual assault (e.g., Lodico, Gruber, & DiClemente, 1996). The relationship between childhood sexual abuse and later sexual aggression has also been demonstrated among Navy trainees. Specifically, in three samples of U.S. Navy recruits (N = 7,850), Merrill and colleagues (2001) demonstrated that after controlling for demographic factors, both childhood physical abuse and childhood sexual abuse were independently and additively predictive of rape. In fact, men who had experienced both forms of abuse were four to six times more likely to commit rape. Additional analyses revealed that alcohol problems and the number of sex partners significantly mediated the relationship between childhood physical and sexual abuse and rape perpetration.

Short- and Long-term Outcomes of Sexual Abuse for Civilian and Military Women and Men

A convincing body of research indicates that men and women who experience sexual victimization either as children or adults are at risk for developing immediate negative outcomes, as well as long-term sequelae (Jumper, 1995; Martin, Rosen, Durand, Knudson, & Stretch, 2000; Mullen, Martin, Anderson, Romans, & Herbison, 1994; Romano & De Luca, 2001). Some of these outcomes include depression (e.g., Jackson, Calhoun, Amick, Maddevere, & Habif, 1990); dissociation (e.g., Chu & Dill, 1990); and anxiety, anger, substance abuse, and greater risk of revictimization (e.g., Briere, 1998; Briere & Runtz, 1988). Victims of sexual assault often blame themselves and focus on what they could have done differently (Janoff-Bulman, 1979). Abdulrehman and De Luca (2001) found that individuals who reported childhood sexual abuse had fewer friends and social contacts and more social adjustment problems than individuals who

had not experienced abuse. Women who have been victims of sexual abuse more than once are more likely to have multiple sexual partners, brief sexual relationships, unintended pregnancies (Wyatt, Guthrie, & Notgrass, 1992), and are at an increased risk of contracting sexually transmitted diseases (Zierler et al., 1991). In addition, sexual victimization is associated with chronic pelvic pain (Springs & Friedrich, 1992), gastrointestinal pains, chronic headache, and morbid obesity (Felitti, 1991). Not surprisingly, victimization during childhood has been associated with the need for psychological and somatic health care when victims reach adulthood (Briere & Runtz, 1988; Browne & Finkelhor, 1986; Fry, 1993; Trickett & Putnam, 1993). However, many victims of sexual abuse do not seek psychological treatment. For instance, Koss and Gaines (1993) found that only 10 percent of women who had been the victims of sexual assault sought professional help. Although many individuals who experience sexual abuse or assault also experience negative outcomes, Finkelhor (1990) estimated that one-third of women who experienced childhood sexual abuse did not report negative symptoms.

There now exists an increasing awareness of male sexual abuse as a serious problem with numerous debilitating consequences. In fact, several recent studies have noted the similar long-term effects for men and women who have experienced sexual abuse (Alsop, 1996; Romano & De Luca, 2001). For instance, Watkins and Bentovim (1992) reported that for boys, the long-term effects of childhood sexual abuse included anxiety, depression, personality disorder, substance dependence, relationship difficulties, and increased risk of becoming a perpetrator of sexual abuse. Although men and women who have been sexually abused may experience many of the same types of difficulties (Briere, Evans, Runtz, & Wall, 1988), sexually abused males tend to exhibit slightly more externalizing problems (e.g., aggression), whereas women who have been sexually abused tend to experience more internalizing difficulties (e.g., depression) (Finkelhor, 1990; Stein, Golding, Siegel, Burnam, & Sorenson, 1988). Briere et al. (1988) speculated that despite any differences in the nature of the abuse, sexual abuse results in comparable levels of psychological symptomology for men and women.

Several studies demonstrate that military veterans and active-duty personnel who have experienced sexual abuse as children are likely to experience psychological symptomology (e.g., Brown & Anderson, 1991; Crawford & Fiedler, 1992; Fontana & Rosenheck, 1998; Raczek, 1992). Bremner et al. (1993) compared two groups of male combat veterans, one with a diagnosis of Post Traumatic Stress Disorder (PTSD) (n = 38) and one with various somatic complaints (n = 28). Twenty-six percent (n = 10) of the PTSD group reported histories of childhood physical abuse, whereas 7 percent (n = 2) of the comparison group reported a history of child abuse. Similarly, Fontana and Rosenheck (1998) found that both duty-related and sexual stress contributed significantly to the development of PTSD. However, sexual stress was found to be almost four times as influential in the development of PTSD as duty-related stress. In their sample of U.S. Air Force basic trainees hospitalized for psychiatric illness, 15 percent had experienced childhood physical or sexual abuse (Brown & Anderson, 1991). Crawford and Fiedler (1992) found that trainees discharged for psychological diagnoses were more likely to have been victims of childhood sexual abuse. In a sample of Navy men referred for psychiatric treatment, Sailors with histories of childhood sexual and/or physical abuse were more likely to have avoidant and paranoid personality disorders than non-abused men (e.g., Chu & Dill, 1990). Female Army veterans who had been raped were more likely to report psychological distress than were non-victimized women (Sadler, 1996). Also, adult rape predicted more severe psychosocial disturbance among female Navy recruits than did childhood sexual abuse. In a subsequent study, Sadler and colleagues (2000) found that among female veterans, violence

during military service was a correlate of impaired health status. The types of difficulties victimized women experienced were physical pain, fatigue, nervousness, and depression.

Merrill and colleagues (1998) reported that even controlling for subsequent victimization, women who were sexually abused before the age of 14 reported significantly greater utilization of health care services in the year prior to beginning recruit training. Similarly, women victimized since the age of 14 also used physical and mental health services more than did nonvictimized women. Merrill noted that whereas rape increased gynecologic treatment, being the victim of any type of sexual victimization increased the likelihood to seek mental health services. Moreover, history of sexual victimization predicted attrition after basic military training among U.S. Air Force trainees (Smikle et al., 1996). Clearly, results of previous studies indicate that sexual victimization either prior to or during military service may impact directly on the psychological well being of Service members. Clearly, these findings demonstrate the need for prevention and treatment programs.

Although investigations of military personnel support previous research on civilians, it is important to note the limitations of previous studies. Often studies of military personnel have examined men experiencing psychiatric illness. Also, the effects of childhood physical and sexual abuse may not have been differentiated. Nevertheless, studies have demonstrated that sexual victimization is a traumatic experience that has important psychological and physical sequelae for Service members. Because military women are at greater risk of premilitary sexual assault relative to college women, they may also be at increased risk of suffering recurrent negative symptomatology. These findings demonstrate the need for prevention and treatment programs. Also, clearly, additional research is needed that examines the relationship between sexual victimization and Service member readiness and attrition.

Appendix C Distribution of Survey Responses by Program and Base

Table C-1.

New Parent Support Program

Survey Distribution

Location	Number Administered	Number Returned	Cooperation Rate ^a	Refusal Rate ^b	Non- Response Rate ^c
Atsugi Naval Air Facility	49	47	95.9%	4.1% (2)	0% (0)
Bethesda Naval Medical Center	32	7	21.9%	0% (0)	78.1% (25)
Bremerton Naval Station	34	10	29.4%	0% (0)	70.6% (24)
Charleston Naval Weapons Station	28	21	75.0%	0% (0)	25.0% (7)
Corpus Christi Naval Air Station	59	59	100%	0% (0)	0% (0)
Everett Naval Station	30	30	100%	0% (0)	0% (0)
Great Lakes Naval Training Center	36	33	91.7%	0% (0)	8.3% (3)
New London Submarine Base at	14	10	71.4%	0% (0)	28.6% (4)
Groton					()
Guam Naval Support Activity	46	36	78.3%	2.2%(1)	19.5% (9)
Jacksonville Naval Air Station	37	36	97.3%	0% (0)	2.7% (1)
Keflavic Naval Air Station	7	.7	100%	0% (0)	0% (0)
LaMaddalena Naval Support Activity	27	22	81.5%	7.4% (2)	11.1% (3)
Meridian Naval Air Station	21	14	66.7%	4.8%(1)	28.5% (6)
Norfolk Naval Station	41	16	31.7%	0% (0)	68.3% (25)
Naples Naval Support Activity	66	53	80.3%	6.1% (4)	13.6% (9)
Paxtuent River Naval Air Station	38	29	76.3%	0% (0)	23.7% (9)
Pensacola Naval Air Station	9	9	100%	0% (0)	0% (0)
Rota Naval Air Station	38	37 .	97.4%	2.6%(1)	0% (0)
Sasebo Fleet Activity	35	28	80.0%	2.9%(1)	17.1% (6)
Sigonella Naval Air Station	89	73	82.0%	6.7% (6)	11.3%(10)
Whidbey Island Naval Air Station	45	43	95.6%	0% (0)	4.4% (2)
Yokosuka Fleet Activity	94	83	88.3%	0% (0)	11.7% (11)
Total	875	703	80.3%	2.1% (18)	17.6% (154)

Note. The NPS programs at Roosevelt Roads Naval Air Station and San Diego Naval Station did not participate. Cooperation rates, refusal rates, and non-response rates could not be calculated for Anacostia (n = 1), Ballston Spa at Saratoga Springs (n = 2), Bangor Naval Submarine Base (n = 20), Brunswick Naval Air Station (n = 5), Gaeta Naval Support Activity (n = 5), Kings Bay Naval Submarine Base (n = 33), NCTAM (n = 1), Naval Security Station (n = 1), New Orleans Naval Air Station (n = 1), and Port Hueneme Naval Construction Battalion Center (n = 10) due to incomplete information. Totals do not equal sample size (N = 821) due to missing (n = 33) and vague (n = 6) location information.

^a Cooperation rate is calculated as the number of surveys returned (completed) divided by the total number of surveys administered (American Association for Public Opinion Research, 2000).

^b Refusal rate is calculated as the number of surveys refused divided by the total number of surveys administered. Number of refusals in parentheses.

^c Non-response rate is calculated as the number of surveys not returned (completed) nor refused divided by the total number of surveys administered. Number of non-responses in parentheses.

Table C-2.
Sexual Assault Intervention Program
Survey Distribution

Location	Number Administered	Number Returned	Cooperation Rate ^a	Refusal Rate ^b	Non- Response Rate ^c
Atsugi Naval Air Facility	14	13	92.9%	7.1% (1)	0% (0)
Corpus Christi Naval Air Station	25	22	88.0%	8.0% (2)	4.0% (1)
Everett Naval Station	11	7	63.6%	36.4% (4)	0% (0)
Gaeta Naval Support Activity	13	10	76.9%	0% (0)	23.1% (3)
Great Lakes Naval Training	22	20	90.9%	0% (0)	9.1% (2)
Center				, ,	
Guam Naval Support Activity	58	45	77.6%	8.6% (5)	13.8% (8)
Guantanamo Bay Naval Station	12	10	83.3%	16.7% (2)	0% (0)
Jacksonville Naval Air Station	52	47	90.4%	0% (0)	9.6% (5)
Kings Bay Naval Submarine Base	26	23	88.5%	11.5% (3)	0% (0)
Lemoore Naval Air Station	2	2	100%	0% (0)	0% (0)
London Naval Activities	7	2	28.6%	0% (0)	71.4% (5)
Mayport Naval Station	20	17	85.0%	0% (0)	15.0% (3)
Norfolk Naval Station	94	88	93.6%	0% (0)	6.4% (6)
Pearl Harbor Naval Station	28	25	89.3%	3.6% (1)	7.1% (2)
Pensacola Naval Air Station	50	11	22.0%	78.0 % (39)	0% (0)
Rota Naval Air Station	34	32	94.1%	0% (0)	5.9% (2)
North Island Naval Air Station	. 1	1	100%	0% (0)	0% (0)
Sigonella Naval Air Station	13	0	0%	0% (0)	100% (13)
Yokosuka Fleet Activity	41	41	100%	0% (0)	0% (0)
Total	523	416	79.5%	10.9% (57)	9.6% (50)

Note. The SAVI programs at Fallon Naval Air Station and San Diego Naval Air Station did not participate. Cooperation rates, refusal rates, and non-response rates could not be calculated for Bangor Naval Submarine Base (n = 1), Bremerton Naval Station (n = 5), Charleston Naval Weapons Station (n = 2), Mid-South Naval Support Activity (n = 1), Naples Naval Support Activity (n = 16), Port Hueneme Naval Construction Battalion Center (n = 1), Sasebo Fleet Activity (n = 2), and Whidbey Island Naval Air Station (n = 36) due to incomplete information. Totals do not equal sample size (N = 503) due to missing (n = 21) and vague (n = 2) location information.

^a Cooperation rate is calculated as the number of surveys returned (completed) divided by the total number of surveys administered (American Association for Public Opinion Research, 2000).

^b Refusal rate is calculated as the number of surveys refused divided by the total number of surveys administered. Number of refusals in parentheses.

^c Non-response rate is calculated as the number of surveys not returned (completed) nor refused divided by the total number of surveys administered. Number of non-responses in parentheses.

Appendix D New Parent Support Program (NPSP) Survey Administration Instructions

New Parents Support Program Counselor Survey Administration Process

This questionnaire is one of several to find out how service members and their families feel about the many support programs and services provided by the Navy.

Public Law 93-579, called the Privacy Act of 1974, requires that participants be informed of the purpose of this survey and of the uses to be made of the information collected. The Navy Personnel Research, Studies, and Technology (NPRST) department of the Navy Personnel Command may collect the information requested in this survey under the authority of Title 5, U.S. Code 301. The information collected will be used to evaluate current QOL programs in the Navy. The data will be analyzed and maintained by NPRST.

Directions for administering/completing the survey:

- 1. Use a No. 2 pencil only (Do not use pen or felt tip markers).
- 2. Read directions aloud to survey participant.
- 3. Administer the survey by providing it to the program recipient and request they complete it while you are present and available to answer any questions they may have.
- 4. After completion, have the participant place their own survey into the return envelope and seal it.
- 5. Mail all completed surveys in their return envelopes at the end of each day.
- 6. If you are running low on surveys please contact us at least a week before you run out
- 7. Please return any unused envelops, unused surveys, and the completed NPSP Data Collection Tracking Sheet (see worksheet for details) at the conclusion of the data collection period (March 30th).

Directions to share with participants (Read aloud)

We are evaluating how well the New Parent Support Program meet your needs and how it is related to your ability to focus on your job and willingness to remain with the Navy. Completing the survey is completely voluntary. All of your answers will be held in confidence. We are asking for the sponsor of the child's SSN so we can match responses together with other questionnaires and surveys. The information provided will be considered only when combined with the responses of other New Parent Support Program users. The information will not become part of your permanent record and will not affect your career in any way. Failure to respond to any questions will not result in any penalties. Do you have any questions? Let's proceed.

Appendix E Sexual Assault Victim Intervention (SAVI) Survey Administration Instructions

Sexual Assault Victim Intervention Program Survey Administration Process

This questionnaire is one of several to find out how service members and their families feel about the many support programs and services provided by the Navy.

Public Law 93-579, called the Privacy Act of 1974, requires that participants be informed of the purpose of this survey and of the uses to be made of the information collected. The Navy Personnel Research, Studies, and Technology (NPRST) department of the Navy Personnel Command may collect the information requested in this survey under the authority of Title 5, U.S. Code 301. The information collected will be used to evaluate current QOL programs in the Navy. The data will be analyzed and maintained by NPRST.

Directions for administering/completing the survey:

- 1. SAVI Program Manager or his/her designated representative will identify appropriate survey participants.
- 2. Schedule a time and location that is convenient for participant for the survey to be administered.
- 3. Invite the participant to have a support person, advocate, and/or friend of their own choosing present during the survey interview.
- 4. Explain the purpose of the survey and answer all participant concerns and questions.
- 5. Use a No. 2 pencil only (Do not use pen or felt tip markers).
- 6. Read directions aloud to survey participant.
- Administer the survey by reading the questions (you'll take one of the surveys to read
 from) and having the participant fill in their responses to each question on their own
 survey form.
- 8. After completion, have the participant place their own survey into a return envelope (provided) and seal it.
- 9. Mail all completed surveys in their return envelopes at the end of each day.
- 10. If you are running low on surveys please contact us at least a week before you run out
- 11. Please return any unused envelopes, unused surveys, and the completed SAVI Data Collection Tracking Sheet (see worksheet for details) at the conclusion of the data collection period (March 30th).
- 12. If at any time during the survey interview, the participant wishes to stop the survey process, their wishes are to be respected. Thank them for their cooperation and conclude the survey.

Directions to share with participants (Read aloud):

We are evaluating how well this victim assistance/prevention education program meets your needs and how it is related to your ability to focus on your job and willingness to remain with the Navy. Completing the survey is completely voluntary. All of your answers will be held in

confidence. We (researchers) are asking for your (or your sponsors) SSN so we can match responses together with other questionnaires and surveys. The information provided will be considered only when combined with the responses of other program users. The information will not become part of your permanent record and will not affect your career in any way. Failure to respond to any questions will not result in any penalties. If you wish to stop the survey interview at any time, or ask questions please tell the interviewer. Do you have any questions? Let's proceed.

Distribution

Chief of Naval Operations (N1, N1B, N46, N463)
Chief of Naval Personnel (PERS-00, PERS-6, PERS-66, PERS-660, PERS-661)
ASN (M&RA)
OSD (MC&FP) (Rene A. Campos, Tony Jurney)
Purdue University, Department of Psychological Services (Dr. Howard M. Weiss)
Defense Technical Information Center (DTIC)